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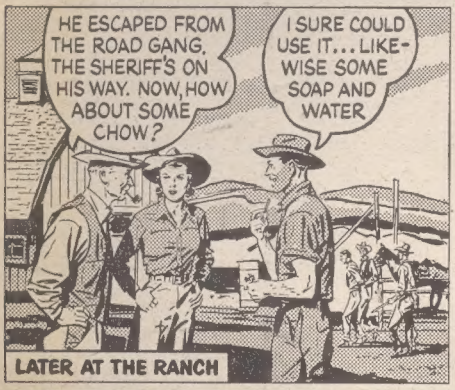
HOPELESSLY LOST IN THE RUGGED CANYON COUNTRY, DIANE BLAIR WISHES SHE'D TAKEN MORE SERIOUSLY THE "DUDE RANCH" RULES AGAINST RIDING ALONE... AND THEN...

ECHOING UP A NEARBY DRAW, HER CRY REACHES A YOUNG GEOLOGIST


HE ESCAPED FROM THE ROAD GANG. THE SHERIFF'S ON HIS WAY. NOW, HOW ABOUT SOME CHOW?
I SURE COULD USE IT... LIKE-WISE SOME SOAP AND WATER
LATER AT THE RANCH

WHEN IT COMES TO SHAVING QUICKLY AND EASILY AT A SAVING, YOU CAN'T BEAT THIN GILLETTES. THEY FAR OUTSELL ALL OTHER LOW-PRICED BLADES BECAUSE THEY'RE KEENER AND LAST LONGER. THIN GILLETTES FIT YOUR GILLETTE RAZOR EXACTLY, SO THEY NEVER NICK OR SCRAPE. ASK FOR THIN GILLETTES
THIN
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10 BLADES
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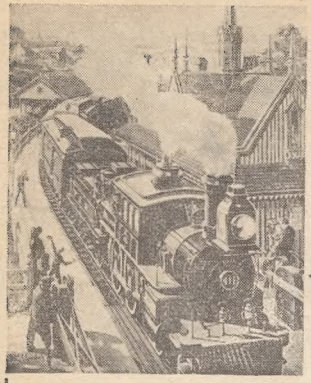

RAILROAD

MAGAZINE

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November, 1951 Vol. 56, No. 2 35 Cents

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Dear Son

By
ARTHUR B. REARDON

DEAR SON: "Cappy" Long came into the office this morning to pay me a social call. In a rather tough spot at home, Cappy told me he'd decided to get on a train and visit friends here in Midland City for a few days. Since the death of his wife some years ago, he's been living with his married daughter in Dixon, whose two two little girls are the pride and joy of Cappy's life.

Well, some months back they adopted a stray cat and it soon became a very important member of the family, at least in their eyes. Yesterday his daughter asked Cappy to put some laundry in the washing machine, which he did. After dumping in some soap powder, he turned on the washer and then busied himself out in the garden. When the machine had completed its cycle and stopped, his daughter got the clothes basket, took out the laundry and discovered in the process one thoroughly washed and very dead cat.

Cappy tried to explain that the animal must have been asleep in the machine, that he had put the clothes in on top of it without seeing it. But nothing he could say eased the situation. This was when he decided to pay a little visit to friends down here. He told me that never in his 40 years on the road had he put himself in a tighter spot.

That last remark means something, for Cappy could get into more jams on the road than everyone I can think of at the moment. For about 25 years he was conductor of the Dixon turnaround, a local freight out of Midland City that ran the 56 miles up to Dixon one day and back the next. An artist getting over the road in heavy traffic, he could do more switching in fewer moves than any man I ever knew and probably the company paid less overtime to the crew on his run than any other local freight. But with all his virtues he was always in hot water.

As an instance, one day No. 3 in charge of Conductor Joe Morrow arrived at Dixon a few minutes after Cappy had registered in on the turnaround. Joe had registered No. 3 and was about to give a highball to his head end when he tripped on the station steps and broke his ankle. Cappy was the only qualified man available and the DS ordered him to run No. 3 to Somerset in place of Morrow.

Dressed in his old working clothes, Cappy kept out of sight in the baggagecar most of the time and instructed his head brakeman to collect tickets and handle the passengers. Everything worked out okay except for one little hitch. According to custom Cappy put all the interline and through tickets in an envelope to turn over to the conductor relieving him at Somerset, and after leaving Warren, his last stop before Somerset, put all his local tickets, cash-fare vouchers and other data in another envelope for the agent at Somerset. Well, Cappy couldn't miss the chance to pull a boner, so he gave the agent's envelope to the conductor relieving him and No. 3 was out of town before his error was discovered.

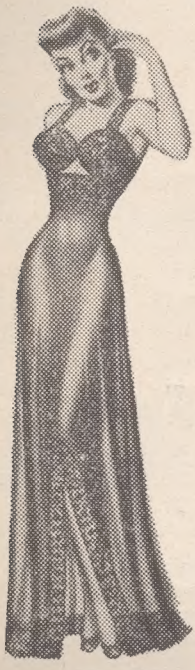
It took a couple of hours to straighten this one out, wiring ticket numbers and destinations when and where they could catch No. 3 and of course Cappy was in the doghouse. I think he was barred from passenger service for a while, although this was no hardship to him as the glamor of the varnished cars and a neat blue uniform held no attraction for him. His local freight run, up today and back tomorrow, getting in the hole for the hotshots and the high-wheeled varnish was where he belonged and where he was happiest.

Hoping you are as happy and contented with your job as he was with his.

Affectionately,
Dad

Bewitching

She'll be your "Dream Girl"
You'll "Bewitch" her with it



Daring
"BLACK
MAGIC"

"DREAM GIRL" She'll look alluring, breathtaking, enticing, exotic. . . . Just picture her in it . . . beautiful, fascinating SEE-THRU sheer. Naughty but nice. . . . It's French Fashion finery . . . with peek-a-boo magic lace. . . . Gorgeously transparent yet completely practical (washes like a dream . . . will not shrink). Has lacy waistline, lacy shoulder straps and everything to make her love you for it. A charm revealing Dream Girl Fashion. . . . In gorgeous Black.

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Heaven Sent

Heaven
Sent
Oriental
Magic

Out of the pages of the Arabian Nights comes this glamorous sheer Harem pajama. You'll look beguiling, alluring, irresistible, enticing. You'll thrill to the sleek, clinging wispy appeal that they will give you. He'll love you for transplanting you to a dream world of adoration centuries old. Brief figure hugging top gives flattering appeal to its daring bare midriff. *Doubled at the right* places, it's the perfect answer for hostess wear. Billowing sheer bottoms for rich luxurious lounging. He'll adore you in this charm revealing Dream Girl Fashion. In wispy sheer black.

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Black Sorcery

Daring Bare-back
She'll be entranced with it

Your Dream girl will be an exquisite vision of allurement, charm, fascination and loveliness in this exotic, bewitching, daring bare-back filmy sheer gown. It's delicate translucent fabric (washes like a dream) will not shrink.
Have Paris at home, with this cleverly designed halter neck that ties or unties at the flick of a finger. Lavishly laced midriff and peek-a-boo bottom. She'll love you for this charm revealing Dream Girl Fashion. In exquisite black sheer.

SATISFACTION GUARANTEED
or your money back.

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Please send **BLACK SORCERY** gown at $9.95. If not entirely satisfied, I'll return within 10 days for full cash refund.

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( ) I will pay postman $9.95 plus postage. Check size wanted:

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(If you don't know the size send approximate height and weight)

Name .....

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HE THROWS THE BOOK

IN 50 years of railroading, Albert L. Arnold never has been disciplined, reprimanded, called in for a question-and-answer statement or suffered a personal injury. Yet every day he "throws the book" at a dozen or more fellow employes. Before you get him wrong, though, Arnold is Instructor of Train Service for the Long Island Rail Road; it's his job to see that every engineman, foreman, conductor and trainman knows and understands the "rules of the road."

What do you have to know to run a train on the LIRR? In the book that Arnold teaches there are over 470 separate rules on everything from forest fires to overheated wheels; 51 fixed signals in the form of position lights, semaphores and color lights, plus many details on the physical characteristics of the road. The latter, in the case of the Long Island, includes 430 miles of mainline track on 12 branches; the location of 326.8 miles of double and 198.5 miles of single track; where the 185 stations and 52 block stations are.

Arnold's right to instruct in train service didn't come by chance. Up through the years he has served as water boy, trackman, telegrapher, train dispatcher, wrecker, engineer and division operator. From 1938 to 1947 he acted in the combined posts of division operator and assistant passenger trainmaster on the Long Island itself, and he knows every mile of the line like his own driveway. Much of it he has covered on foot, at one time or another.

Probably the toughest phase of instruction is the fixed signals, but in Arnold's headquarters at Jamaica there is an ingenious electric board that simulates in miniature every possible signal aspect an operator might encounter on the line. Simply by changing electric connections on the board, Arnold can set up a run which will test an engineman's know-how on what to do when he meets a smash-board, a permissive block or a slow-approach. These are parts of the tests that are given to train and service personnel every three years. Also, if a man hasn't been over any particular branch in two years, he must requalify before Arnold's board.

Due to retire this year, Albert Arnold has spent a full life in railroading, as did his father before him. Now his son Richard is following his footsteps as movement director on the Pennsy's Williamsport Division.

However, Poppa Arnold doubts whether he'll ever see as much movement as he did on the Long Island during September 3, 1939. That was a full day's work. The New York World's Fair was in progress and Arnold supervised the movement of 241 westbound and 245 eastbound trains. It still gives him pause to think that there's something truly great about railroading.

—Harry C. Thompson

deafness

Nearly Cost Me MY JOB!

... until I discovered this New Electronic Way to Hear!

Nothing can ruin a man's business chances more surely than loss of hearing. People get the idea that you are growing stupid, slow-witted and old —ready for "the shelf."

But I stubbornly fought the idea of wearing a hearing aid. I rebelled against that unsightly "button in the ear"—against dangling battery wires and clumsy battery packs.

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Today I can hear clearly again—even faintest whispers. No more office mistakes and misunderstandings because I "couldn't hear." Thanks to the new Beltone, I can again hold my own with *anyone*—in business or anywhere else!

If you are hard-of-hearing, don't resign yourself to the handicaps that deafness brings. Send for the valuable FREE book on what Beltone is doing for the deaf! No cost, no obligation. Do it now!

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Please send me (in plain wrapper) FREE booklet on OVERCOMING DEAFNESS without a button showing in the ear.

Name.....

Address.....

Town.....State.....

BLOW THAT WHISTLE

HAYWIRE MAC

CASEY JONES has been with the immortals for many years. His peaceful resting place is marked by a dignified monument and the locomotive on which he made his final run was scrapped long, long ago.

But the whistle that Casey "quilled" so melodiously still wakes the echoes! By what quirk of fate it survived is not clear to me at the moment, but I am accepting the tale that came my way and I'll never be satisfied until I have heard the sound of that famous whippoorwill whistle.

When we were "On The Spot" in the May issue of this magazine I popped off about whistles—the melodious old steam whistles which sang of high adventure and far horizons to generations of American kids and which may soon be a memory. There is a lot of romance tied in with those whistles; they said something special and very secret to country boys when they sounded in the night, and few of the country boys ever forgot.

That crack of mine wasn't intended as a trial balloon but that is what it turned out to be. I suggested that the music of the vanishing steam whistle should be recorded and preserved so that our grandchildren would know what we were talking about.

And in came a bunch of letters from railfans endorsing the idea and surprising me with the information that other rail lovers had come to the same conclusion and had done something about it. That's where Casey's whistle comes in.

The most interesting letter received to date was from Howard E. Robertson of the St. Francois County Railroad Club, of Bonne Terre, Missouri. And what a club!

"We are one hundred per cent for the idea," says Robertson, "we have been doing this very thing for more than two years. Attached is a picture of Casey Jones' whistle. We have recordings of all the whistles we own. Every time we get a new one we put it on the local switch engine, MI No 7, try it out and make our recording.

"The recording of the Casey Jones whistle has been used for the past two years in the Polio Fund drive, to which radio station KFMO, Flat River, devotes four hours of it's evening time.

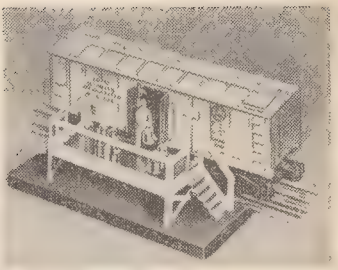
"It was announced that the whistle would be blown for everyone donating five dollars or more, but the calls were soon coming in so fast that the names had to be bunched and the whistle sounded after a list had been read. Donations exceeded all expectations and the drive went over with a bang."

This St. Francois County Railroad Club seems to be a sure-enough live outfit. There is a collection of whistles donated by the MoPac, Missouri-Illinois, M&O, C&EI, Rock Island, L&N, Frisco, B&O and the old MR&BT. Plus two locomotive bells, one from the Missouri Pacific and one from the Nickel Plate.

All of these items, along with hundreds of pictures, old train orders, waybills and other railroadiana, plus an HO-gage model layout, are housed in the main waiting-room of the Bonne Terre Depot and visitors from all parts of the country give the joint a tumble. Mr. Robertson used better language, but that's what he meant. This is some club.

But let's get back to our whistles. Mr. George W. Pettengill, Jr. of 4245 Burlington Ave., St. Petersburg, Florida, has a magnetic tape recorder capable of doing a professional job. "To date," he says, "I have compiled a ten-minute recording of the departure of an Atlantic Coast Line passenger train from the downtown St. Petersburg depot, up the

Conveyor Type Operating Lumber Loader — Push remote control button and conveyor belt starts moving, picking up logs one at a time and raising them slowly to upper platform, from which they tumble automatically over tilting stakes into waiting car. No siding needed!



Operating Milk Car and Platform — Press remote control button and doors open, milkman picks up dairy cans one at a time, puts them on platform. (Tiny magnets in bottoms of cans hold them upright!) Pure white car with real "reefer" detail. Stainless steel platform.

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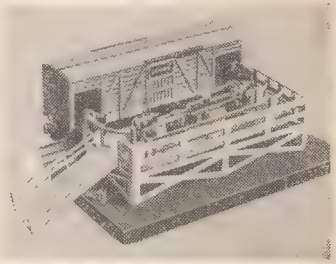
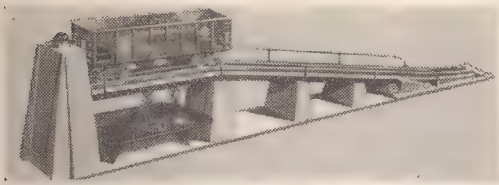


Operating Cattle Car and Platform — Press remote control button and, first, the overhead car-doors open, then loading ramps drop, then cattle plod out through corralways and back into car! Includes 9 head of cattle.



Operating Coal Ramp and Hopper Car — THREE remote control operations after you switch hopper car onto ramp! Press first button and train uncouples from hopper car, to roll away. Press second button and hoppers open, coal unloads into bin. Press third button and hopper car uncouples, to roll back to lower track. Includes ramp, hopper, coal.

Diesel Type Operating Coal Loader — Remote control switch loads car with artificial coal carried up in conveyor buckets. Operates anywhere on track, no sidings needed.

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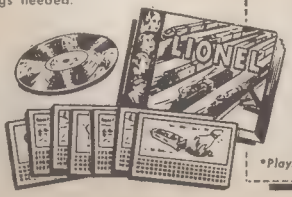

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steep grade through the business section, and then the train as it gets out into the outskirts of town. By pre-arrangement with the engineer I got several samples of that never-to-be-forgotten Dixie whistling (so the hoggers still quill 'em down there). The final whistle signal was given at night when the train was at a distance of about three miles from where I was recording."

MR. PETTENGILL, it is needless to say, had a lot of cooperation from local ACL officials and he is hoping for more of the same for furtherance of his project. He wants recordings of steam locomotives running at speed; also a series of typical terminal locomotive, and other, sounds.

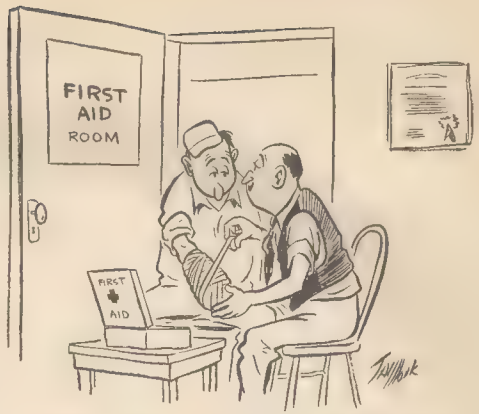
Mr. Pettengill must be quite a lad. Says he, "I can think of nothing more unusual as a sound recording, than the soft, panting exhaust of one of those old cabbage-stacked gals. There are still a few of them around here."

Frank E. McKeever, 2111 Windsor Ave., Altadena, California, says, "What a grand thing it would be to be able to purchase an album of whistle records of most of the major railroads of the country. Hope you can get the ball rolling on this treasure chest of railroadiana."

He also states that Fred McLeod at 1068 Fifth St., Oakmont, Pa., has some fine recordings of PRR, B&O and New York Central whistles and engine sounds, all identified, which he sells to anyone interested.

McKeever claims that these recordings have been advertised several times in *Railroad* and elsewhere. Which taught me a lesson. From now on I'm going to read the ads as well as the stories and articles.

And, finally, Stanley J. Sebolt, 831 South East 71st Ave., Portland, Oregon, comes up with another idea. "There are a lot of Diesel yard goats," says he, "that have flash boilers to which steam whistles could be attached. And the mutliple Diesel jobs that pull the mainline varnish have steam boilers for heating the cars and



"Now—what we mean by punching the time clock . . ."

it seems to me that it would be the easiest thing in the world for the builders of the Diesel power to install steam whistles on those units. That would be the thing to go to work on."

Is that a practical idea? Let's hear from some of the roundhouse gang, the boys who are in the know.

We need more information on this subject—and more ideas. How many railfans or clubs have made recordings already? How many others could we interest in a similar project? And how many potential buyers are there?

We need ideas about presentation too. My own feeling is that the whistle sounds should be strung on a thread of vocal narrative; something like the pictorial travelogue. The railroad, the locomotive and the historic train it hauled should be identified. What do you think?

I have 26 years of experience as a radio performer, script writer and producer and I am willing to help whip this project into shape. From where I am sitting I can't see much profit in the deal for myself or anyone else. For all concerned it will have to be a labor of love—everything except the final stamping of the platters, which will have to be done by some commercial firm equipped for the job.

Let's have it railfans! Where do we go from here? Address all communications to: Harry K. McClintock, 8911 So. Pacific Ave., San Pedro, Calif.

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BADGER STATE ROAD

JIM SCRIBBINS

CHANCES are that Mr. Average Man, even in Wisconsin, has never heard of the Green Bay & Western. But many traffic managers and shippers of freight to and from the great northwest could tell you it's an efficient little railroad, and that in connection with Ann Arbor and Chesapeake & Ohio car-ferries it participates in a fast freight route, by-passing the hodge-podge of railroads in the immediate vicinity of Chicago. Most railfans could locate its freight-only line running between Kewaunee, on Lake Michigan's Wisconsin shore, to Winona just across the Father-of-Waters in Minnesota. Some of the more learned students of railroading undoubtedly would inform us that the Green Bay Route owns one of the finest herds of 2-8-2 iron horses and that in recent years it has acquired quite a number of Diesel locomotives. Yet most of the facts about the "Grab Baggage

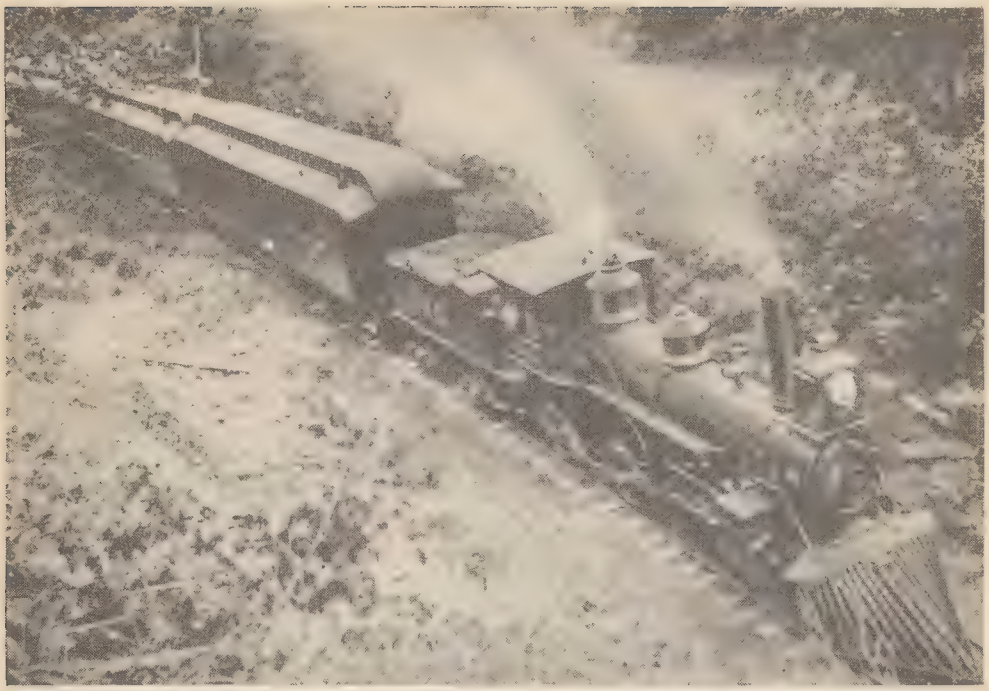
All photos by the author, unless otherwise noted

Come Aboard Time Freight Number 2 and Witness a Model of Efficient Operation on One of Our Smallest Class I Railroads

and Walk" are unknown to the outside world.

That nick-name itself is misleading, becaused GB&W hasn't carried any passengers since 1949, and even then the passengers, if any, rode on mixed trains on the main line. Mixed trains on the branch lines were discontinued in 1939, and operation of full-fledged varnish trains came to an end back in 1935.

For a railroad of its type, the Green Bay Route has been a leader in adopting modern methods of railroading. It has been using Diesel locomotives—first in switching, then on through freights—since 1937. Radio communication between switch engines and the yard office at Green Bay was installed in 1947, and it is entirely likely that in due time radio will be extended over the entire system, replacing the present telegraph and telephone circuits. Modernization, which seems to be a



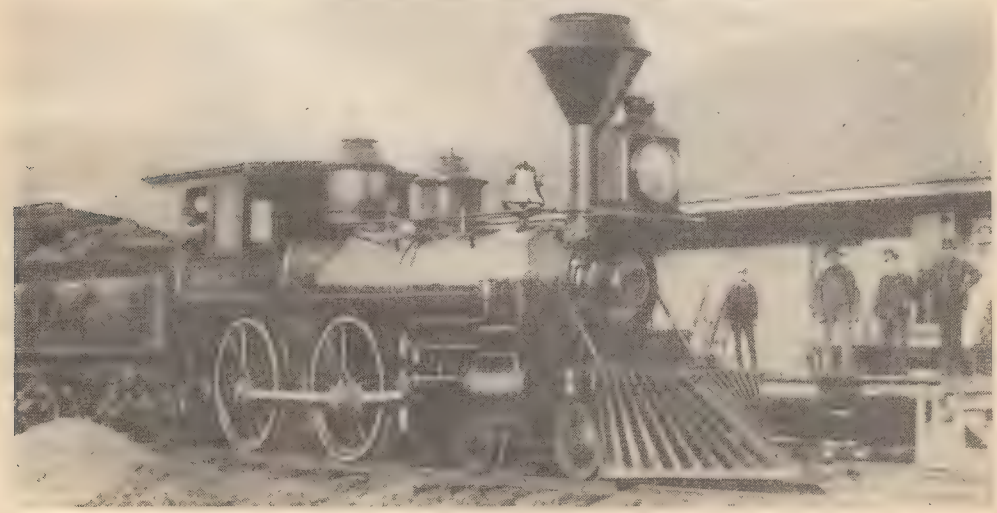
Four photos from Alvin Lea

Country-boy's view of GB&W No. 10 with two coaches and baggage car back in the days of open platforms and hat valves

never-ending procedure on the GB&W, extends even to new typewriters and office furniture in the depots along the line.

Most of us have seen photos of the Burlington's well-maintained right-of-way. That of the GB&W is the Burlington's on a single track scale, with clean gravel ballast supporting the 90-pound rail and making an ideal running track for the *Mikados* and growlers.

No. 12 posed with friends at Scandinavia, Wisc. in 1886. Road was originally chartered in 1861, as Green Bay & Lake Pepin



Proud Engineer W. Whiting in the cab of his *American* type at Stevens Point in 1890. Due to GB&W Dieselization program, present-day *Mikados* will probably soon join these pioneers in Valhalla of the iron horse

And you should see those engines. The 2-8-2s are modern power in every sense of the word. Built by Alco in 1937 and 1939, they sport grey smoke boxes, black boiler jackets that always shine, and extending the full length of the running-boards and continuing along the side of the tender is a white stripe; and down the center of this white stripe is a green one. No wonder the *Mikes* are favorites of engine picture fans.

The six *Mikados* and one aging *Consolidation* represent the full roster of Green Bay steam power, which at this writing are all in storage. Until about two years ago there were also some little *Moguls,* 6-wheel switchers and three more 2-8-0s, all with the same neat appearance as the *Mikes* except for the fancy stripe. The last 0-6-0 went to the industrial railroad of the Consolidated Water Power and Paper Company, one of GB&W's good customers at Wisconsin Rapids, and some time ago the last of the 2-6-0s could be seen in a somewhat nude condition in a Green Bay junk yard.

One-spot (note back-up "headlight") pulls first train into Iola from Scandinavia in 1894. This was on Iola & Northern, eventually absorbed by GB&W

Ferry yard at Kewaunee, Wisc. as seen from Ann Arbor boat, where old truck-less coach serves as yard office. Train Number 1's caboose is on right of it

As on most other railroads, Diesel power made its debut on the Green Bay Route in switching service with engines that were painted a dull black; but when the road Diesels arrived in 1948 all signs of drabness were left far behind. A new Diesel color combination of red with a broad light grey stripe, plus yellow lettering and trim made the streamlined 1500 hp. road engines eye-catching to say the least, and the 101 and 103 were repainted accordingly. All newer switchers have received the road's bright, distinctive color scheme.

The six streamlined 500-series road engines head Green Bay Route's Diesel fleet. All are cab units and they are used singly or in combinations up to 3000 hp. Engine 101 is a 600 hp. switcher with the old high hood, while the 102 and 103 are 660 hp. and the 201 is a big 1000 hp. job. The 102 and 201 are used at Green Bay while the 101 and 103 work at Wisconsin Rapids and on the Biron branch, which is operated as part of Wisconsin Rapids yard. There are no switchers at Kewaunee and Winona and the road crews make up their own trains. Newest locomotives on the line are some 1500 hp. road switchers numbered in the 300 series. All the road's present motive power, as well as that of the past, was built by Alco. Needless to say, the management of the road is working towards complete Dieselization.

Green Bay & Western needs the best motive power, for in addition to the trunk line routes between Chicago, the Twin Cities and the Northwest, it has to contend with some heavy competition from railroads of its own class: lines that take freight around Chicago, not through it.

The Minneapolis & St. Louis—Toledo, Peoria & Western setup through the Peoria Gateway is in direct competition to the GB&W. So is the Soo Line's own

route from the Twin Cities to the car-ferries at Manitowoc, though GB&W receives several cars each day from the Soo at Amherst Junction for movement to Kewaunee. Another competitor, and this will undoubtedly prove surprising to many readers, is what might be described as the "Northern Route" from Duluth. Great Northern and Northern Pacific deliver cars to the Duluth South Shore & Atlantic, and the South Shore turns them over to the little Manistique & Lake Superior at Shingleton, Michigan for the last lap to Manistique, where the Ann Arbor ferry receives about 30 cars each day via this route.

Routing of freight via Green Bay & Western and the car-ferries saves 12 to 36 hours in either direction over movement of cars through Chicago. That time often is quite important to shippers who are in a hurry.

While not a competitive route, there is interchange with the Chicago Great Western at Winona, to and from stations in southern Minnesota and even as far distant as Omaha and Kansas City.

WHAT DOES Green Bay & Western carry? Well, like most railroads, just about everything. Back in the good old days, which were not as good as they were cracked up to be, nor as bright as the road's future, local agricultural products furnished most of the revenue. Now, thanks to an aggressive management, the traffic picture has changed. While flour, grain, frozen fruit and other agricultural products still consitute a majority of eastbound tonnage, manufactured products (Ford parts in particular) are the main producers of westbound manifests.

Coal is the biggest single tonnage item, some of it coming across the lake on loaded cars on the ferries, but most of it being received at the large dock at Mason Street yard in Green Bay. The Ford Motor Company is perhaps the line's biggest individual shipper. Parts are sent from Detroit to the Minneapolis plant via ferry, GB&W to Winona and thence the Milwaukee or Burlington. There is also considerable movement from Ford's Iron Mountain, Mich. plant via CMSTP&P to Green Bay, then KGB&W to Kewaunee destined for Detroit. Appropriately enough, President McGee of the GB&W drives a Lincoln.

The railroad itself actually comprises two companies: Kewaunee Green Bay & Western, operating 36 branch-free mainline miles between Kewaunee and Norwood Yard in Green Bay; and Green Bay & Western operating everything between Green Bay and East Winona, Wisc. "Everything" includes the main line and two short branches: Scandinavia to Iola and Plover to Stevens Point, both serviced by the Green Bay-Wisconsin Rapids wayfreights and the previously mentioned Biron branch. The portion of the railroad between East Winona and Winona is a separate company: the Winona Bridge & Terminal owning the Mississippi River Bridge and right-of-way used by GB&W and Burlington trains to enter Winona and by Chicago Great Western trains to

Wisconsin Rapids Yard in the summer of 1947 offered this impressive view of handsome *Mikado* 402, just off Train 2. Mogul 253, now scrapped, was consort. Diesel Switchers 101 and 103 do the chores in this garden and on short Biron Branch, see map opposite

get to the Wisconsin side of the water.

The route of the railroad is almost as straight across the Badger State as the map in the Official Guide would have you believe. It runs almost due West from Kewaunee through Green Bay, New London and Wisconsin Rapids, but drops somewhat to the southwest between Merrillan and Winona. It lies in about the center of Wisconsin, separating the industrial and urban southern half from the woodsy resort and lumbering and agricultural areas of the northern half. The Green Bay & Western is "up where the North Begins."

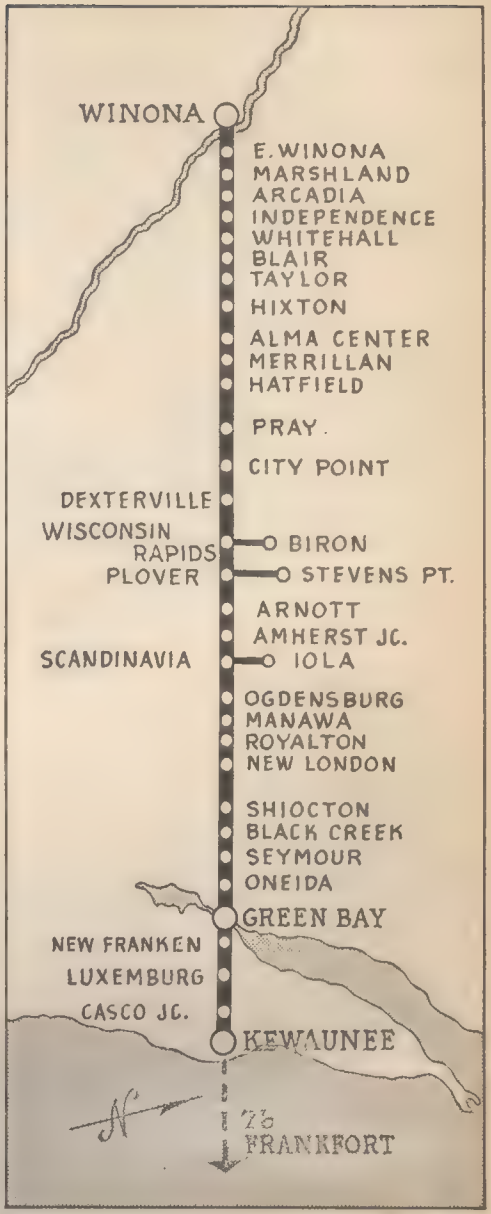
Engines and other equipment are owned and lettered separately by the GB&W and the KGB&W but see service over the entire system. The KGB is operated as the Kewaunee Division, while the New London Division extends 95 miles between Green Bay and Wisconsin Rapids and the remaining 118 miles to Winona make up the Whitehall Division.

But enough of facts and figures, let's take a ride over the Green Bay Route and see for ourselves what makes it tick so well.

So that we may see the entire line by daylight, we will start our inspection tour by riding eastbound time freight Number Two, and it's 5:55 a. m. when we step off Milwaukee Road's streamlined *Pioneer Limited* into the morning sunlight in Winona. We have some four hours until No. 2's departure.

We find the GB&W sharing the modernistic Burlington station near the Mississippi. A ticket office occupies the front part of the building and a bus is waiting to take passengers over to the Wisconsin side to catch the southbound *Morning Zephyr;* but a bright red herald beckons us to the GB&W's office.

About 9:00 a. m. Agent R. J. McDonough says it's time to drive to the yard at Bridge Jct. As we enter the residential section, the track which had been behind the depot comes out of hiding and runs down the middle of the street, streetcar style. Only switch engines with a few odd cars operate over this stretch of track.



Turn map sideways so that arrow points up and see how the GB&W crosses the Badger State in a clean, straight line

At the Southeast edge of the city between the bluffs and the Mississippi are the Bridge Jct. yard and roundhouse, a joint operation of the GB&W, CB&Q and CGW, with the Great Western using an old gas-electric car as a switch engine.

We may see a Milwaukee 0-6-0 come in with a cut of cars, too. Two small bunkhouses are maintained adjacent to the roundhouse for the use of crews who must tie up overnight away from their home terminal of Wisconsin Rapids.

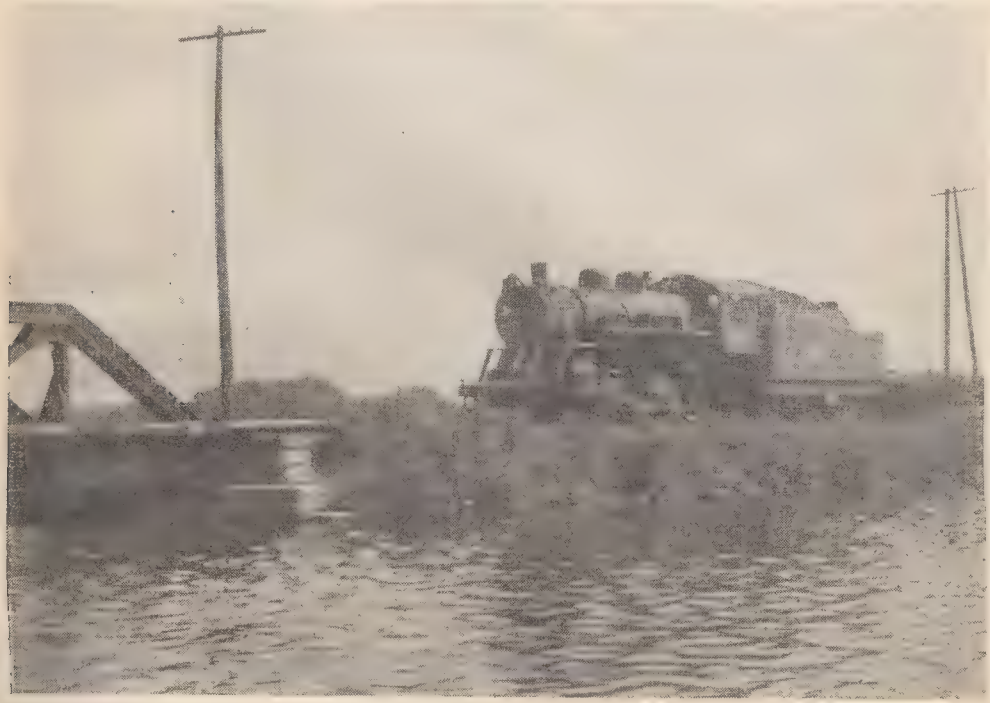
Activity begins when Diesel 502 backs away from the house and picks up its caboose on the way to the yard to make up its train. Promptly at 10:01 a. m., Train 2 whistles off and the motor purrs lightly as the growler goes up the approach and out over the bridge. From the rear platform of the bay-window caboose we get a good look at GB&W's biggest bridge. The Minnesota end is of steel arch construction with a swinging center span to permit passage of river traffic; but the Wisconsin side is largely a long timber trestle curving towards shore with a beautiful view of the Minnesota bluffs in the background.

We clatter across the Burlington main line and the crew deserts us temporarily, going back to the Q interchange track in search of additional cars. While they are gone we can hear the horn and rumble of the *Morning Zephyr* as it speeds southward unseen.

No. 2 leaves East Winona 15 minutes late. Running through the bottom lands away from the river and around woodland curves near Dodge and Paso we are in close contact with nature as the train clickty-clacks through the woods beside a tumbling brook. In some ways the railroad seems out of place, just as the Monon often does in Southern Indiana.

We come into Arcadia 10 minutes late and we are 20 minutes late leaving after picking up two loads of stock. There are still curves and woods but the countryside is beginning to change. We round a curve and enter Blair, named for one of the founders of the road. Suddenly something black bobs up beside us, followed by some red objects: way-freight Number 5 in the hole for us. Blaid was once a terminal of the Ettrick & Blair, a short line now remembered by few.

Consolidation 351 and mixed freight—Train 5—crossing Wisconsin River bound for Winona. Coal is GB'W's biggest tonnage item, but Ford Motor Co. is important customer with shipments of Flivver parts



EAST OF Hixton we begin to see Wisconsin's sandstone bluffs, and coming around the curve into Alma Center we estimate our speed at approximately 60 mph. Our engineer is making up time with a vengeance.

Just a few miles farther on is Merrillan and No. 2 raises a cloud of sandy dust as it brakes for the Omaha crossing. We're held for a few minutes while CSTPM&O's *Viking* day-local No. 508 does its station work. Standing out in the hot sun we hear the slack run out, and we jump on the caboose as it slides by.

Out of Merrillan we enter an area composed mostly of sandy soil, scrub pines, bluffs and—snakes. The Green Bay Route operates through the middle of this rather desolate part of Wisconsin and raises quite a bit of dust in so doing. On this straight, level stretch the former 2-6-0s had no trouble at all making 70 mph. with the "President's Special": a wooden baggage-car and coach and a steel business car.

There is a noticeable absence of human habitation; most of the communities along this part of the line are little more than dots on the map. A large dam in the Black River marks the site of Hatfield, with its abandoned stone depot. There's a slam-bang as we bounce over the Milwaukee Road branch at Dexterville. It's hot and we find ourselves making frequent trips to the ice-box for cool drinks of water.

A few minutes more and we reach the outskirts of Wisconsin Rapids, the largest community between Winona and Green Bay. Here the GB&W, Milwaukee, Soo Line and North Western all meet at a common crossing and connecting tracks, and there is also the industrial railroad of the Consolidated Water Power & Paper Co.

Wisconsin Rapids yard and depot are on the east side of the long bridge over the Wisconsin River. Number 2 arrives right on time at 2:05 p. m., and because it blocks a highway crossing Switcher 103 drags our caboose and 5 or 6 cars back towards the bridge. We'll use the stopping time here to look at GB&W's mainline division point.

The small yard containing only half a

Consolidation **350 has 22 years of drag service behind her; worked out of midway division point of Wisconsin Rapids**

dozen tracks is separated from the roundhouse by the main line. The station and some tool-houses are alongside the engine house. KGB 103 is the regular yard engine. The 101 helps out when needed and also works the Biron Branch and switches at "Consolidated." The Diesels came to the Rapids from Green Bay in 1948.

After the 103 has shoved the train together again we find the consist of No. 2 has grown to 40 cars, nearly double what we brought in from Winona, and we highball promptly at 2:30 p. m. We're in the caboose again, but we'll change to the head end later on. Color light automatic block signals are in use as far as Coyne, where the branch turns north to Biron on the Wisconsin River. We slide through Plover and see the Stevens Point branch departing to our left, and by the time Two begins to slow for the stop at Amherst Jct. all traces of the sandy country have been left behind.

We cross both the Soo Line and U.S. Highway 10 on a long steel trestle and see

Old *Mogul* bought before the road absorbed Waupaca Green Bay Ry.; Kewaunee, Green Bay & Western; and Ahnapee & Western; acquisitions which jumped originated traffic from 29 to 86 percent

Largest steam power on the GB&W are *Mikados* of the D-47 Class, which develop 47,285 pounds' tractive effort

a *Mike* which has just left 20 cars for us couple onto the Soo way-freight. As we clear the passing track, one of GB's own handsome 2-8-2s heads west with a work train and another D-47 is in the clear with Eastbound Way-freight No. 8.

It's a long way to the head end and we reach the engine just as the air test is being completed. There are 57 loads and 3 empties in the consist of Number 2 now, and as she whines out of the junction it seems as though the 502 is straining every one of her 1500 hp., but at Scandinavia 8 miles farther along we are rolling at 40 mph. Scandinavia's little depot is located on a curve beneath rolling green hills and many persons think it is one of the prettiest places on the road. We can see the Iola branch on the left and the engineer takes time to point out the place where the abandoned Waupaca branch left the main line.

Ogdensburg flashes by, then Manawa with Number 7, the westbound way-freight, in the siding with Engine 404. At New London the operator hoops up an order for a meet with Number 1 at Oneida.

Rolling through Black Creek we take note of the very modern brick depot. Only 22 more miles to go now, and the 502 is running right along. The speed

Little switcher, big cab. Like all of the system's motive power, the 141 came from Alco

Photo from Alvin Lea

Left: GB&W Diesel fleet leaders are 1500 hp. 500-series Alcos. Here 502 backs to CB&Q interchange at East Winona. *Below:* 1000 hp. Yard Engine 201 at Green Bay is also Alco-built

recorder indicates a steady 45 to 50 mph.

Westward trains are superior to eastward ones of the same class on the Green Bay Route, so at Oneida our engineer holds the train to a slow walk while the brakeman runs ahead and opens the switch into the passing track. Just as we get in the clear the blast of an air-horn is heard and another red-and-grey Diesel, the 501, comes around the bend heading in our direction with Train No. 1.

With only nine more miles to go, there are no exceptional bursts of speed, 40 mph. being about average. Soon the farms give way to country homes, golf courses and swimming pools, and then the west end of Green Bay where we find ourselves facing the signals governing the automatic-interlocked crossing with the Milwaukee Road.

Once over the Milwaukee crossing the brakeman jumps off. Leaving about half the train on the main line the crew doubles Train 2 into Norwood and it's 6:00 p. m. when we stop at the east end of the yard.

Most conspicuous thing about Norwood Yard is the large grain elevator. The yard itself is long and narrow, with the roundhouse, now mostly a Diesel proposition, and the small but modern shop on its south side. The nerve center of the road, the dispatchers office, is housed in a bright yellow coach body on a cement foundation at the west end of the garden. Wye tracks lead from each end to the north, and unite, forming the main line of the KGB&W. Yard limits extend about 4 miles along the KGB, and another track extends about a mile downtown to the depot and Mason Street Yard.

THE DEPOT now houses the offices of the operating and traffic departments and the modern freight-house is across the street from the depot. Prominent feature at Mason Street is the large crane used to unload coal boats.

We could continue to Kewaunee on Number 2, but in order to see the KGB&W in daytime hours we will stay overnight in Green Bay and ride Number 4 tomorrow morning.

Shortly after 6:00 a. m. we present ourselves at the dispatcher's office at Norwood, and that worthy individual gives us a company telegram signed by our good friend Superintendent Weldon McGee authorizing the conductor to carry us to Kewaunee and return on Trains 4 and 1.

No. 4's caboose is standing just outside

the yard office on one of the wye tracks behind 20 cars, with engine 403 the KGB&W's own 2-8-2 on the business end.

Promptly at 6:30 a. m. the highball is given and we swing aboard Caboose 603 just as two blasts from the big *Mike* float through the morning mists.

The first two miles are covered at little more than a snail's pace for quite a few reasons, the first of which is a little difficult to explain. You have to see it. Immediately out of Norwood the line would parallel a street—if there were a street to parallel. But there isn't—the railroad just cuts across the front yards of several homes. Sidewalks lead from these houses across the track to join another sidewalk which parallels the track to a cross street. Almost miraculously pedestrians are seldom, if ever, run down by trains or engines.

Past this obstacle we run through quite a sharp reverse curve and past the C&NW Green Bay Yard. A Northwestern freight Diesel is waiting for us at the crossing. On the rear platform our flagman gets a highball from the towerman, indicating everything is in good order and we roll over the long Fox River Bridge. Thus far we have been protected by automatic color light block signals. Passing Haevers the crew point out the four percent grade leading up to a large cheese factory, up which Diesel 102 takes 4 or 5 cars a day at about six mph. Up ahead our own 403 starts to dig her toes into the long one percent grade leading up to Summit.

From the rear platform of the caboose we are privileged to gaze upon some of Wisconsin's finest scenery. For five or six miles the line twists and turns through a wooded area and only the noisy little creek alongside, the exhaust of the engine and the clickty-clack of the wheels disturb the silence of nature. The curves offer us a good opportunity to photograph the engine up ahead and we notice the similarity between this area and the first few miles out of Winona yesterday.

We crawl by a passing track and a sign proclaims "Summit." Evidence of new grading and new ballast are present. The exhaust dies down as the speed of the train increases to about 40 mph., the maximum permitted on the KGB&W. Pasture lands and farm buildings dot the landscape and three miles farther on our approach to New Franken is heralded when the engineer eases off entering a rather sharp curve. Around the bend the train order signal indicates a clear block ahead and the slack runs out, giving the caboose quite a jerk.

Bound for Winona, the end of the line, Mixed Train No. 5 rambles off the Wisconsin River Bridge with open-platform coach cut in ahead of caboose. Since 1949 GB&W has been getting along without passenger business

Photo from Alvin Lea

John Seymour (near tender) was conductor of Train No. 1 in 1906. Old photo shows her stopped at Green Bay depot

The six miles to Luxumberg are covered at an average of about 40 mph. and another clear board keeps us on our way towards Kewaunee.

But four miles and eight minutes later we slow down and come to a stop at Casco Jct. as members of a large track gang wave friendly greetings. Up front the two brakemen cut off the 403 and guide it in, making a pick-up from the Ahnapee & Western. A wye, plus a couple of interchange and passing tracks and a water tower make up Casco Jct. The tiny village of Casco is a few miles to the north on the A&W. Leaving town we see the short line's little ex-GB&W 2–6–0 No. 260 taking water.

The thirteen miles down to Kewaunee are much like the country between Haevers and Summit. The farmlands give way to the same woods and meandering little creeks. The train has the grade in its favor and coasts down towards Lake Michigan without apparent effort.

We take a succession of photos from the bay-windows of the van as the train rounds the bends: first to the left, then to the right, and back to the left again. Though there are several curves, they are not sharp and the engineer can take his train through them without decreasing his cruising speed of 35 to 40 mph.

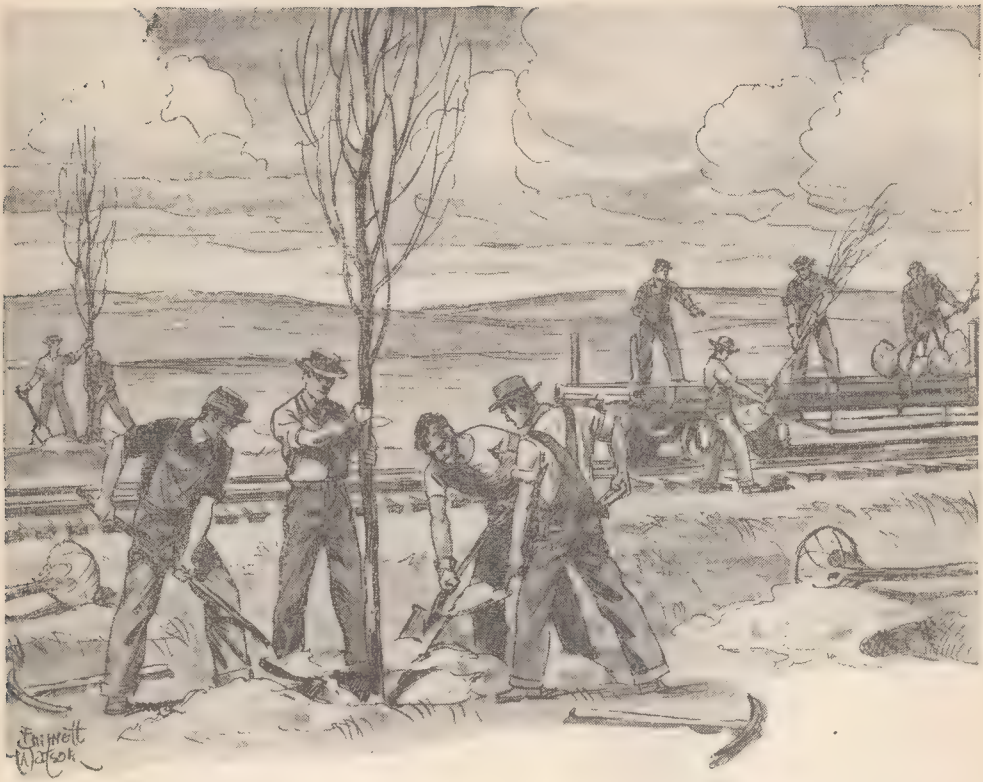
Rather abruptly we dart out of the hills and woods onto the flat lands leading to Kewaunee Harbor. Passing under the state highway bridge we notice a rail-fan using it as a vantage point to photograph the train.

Now we are entering Ferry Yard, which is on the north side of the river opposite the town. When necessary to switch locally in Kewaunee, the crew must take their engine and cars and return to the highway overpass and then go around one leg of the wye, over the river and into town. Such is the case today.

Leaving the caboose and most of the cars at the ferry yard, the crew goes downtown, delivers a couple of cars and picks up some that will go to Green Bay on Number 1. While we have been switching in Kewaunee proper an Ann Arbor boat has come in, and back at the yard we watch the crew as they go through the rather intricate job of taking the cars off the ferry and then loading those which we brought over on Number 4.

In not too long a time the task is finished. The steamer gives a couple of long, melodious toots and churns its way towards the harbor entrance. Just watching the boat twist its way into the river from the dock is interesting enough to make us want to follow the freight cars on their eastward journey, but our story concerns the GB&W, and now the Green Bay & Western's part of the job is complete. We have had the enjoyable opportunity of witnessing the operations of an important, though small, Class 1 railroad. Now we must board time freight Number One for the trip back to Green Bay to go home from there on the *Chippewa Hiawatha.*

HOBO, the noun long associated with gents who steal rides on freight trains, is a corruption of *hoe boy*, according to no less an authority than the *Hobo News*. Years ago most farm work was done with hoes by roving bands of men. These men, called hoe boys, hopped freights and worked wherever they could find it. Their stock in trade was a hoe over the shoulder with a small bundle of belongings tied to the workable end.



PART IV

The Land Grant Legend

HARRIET GROSS

RAILROAD statistics abound in oddities. One of the most curious to the railroader acquainted with the Big Q's long and devoted service to agriculture is the fact that of the 29 million tons of freight hauled annually by the Burlington only 20 percent is farm produced. Mine products and manufactured goods account for 70 percent of the road's annual tonnage, yet in everybody's mind the CB&Q is pre-eminently the Granger Line.

The Burlington was born in Illinois in 1849 as the Aurora Branch Railway. John Murray Forbes, Michigan Central magnate, began to call the 12-mile track the Chicago & Aurora; he extended it by the purchase of small, bankrupt lines to Quincy, Ill. and Burlington, Ia., both on the banks of the Mississippi, in 1855. To the C&A he added the unfinished Hannibal & St. Joseph, with a half million Missouri acres in land grants. The two lines met and merged at Palmyra, Mo. Through the Burlington & Missouri River Railroad (which included over 2 million acres of prairie land), he reached his lines into Omaha to connect with the Union Pacific and the Central Pacific. Today, the Forbes-created roads operate

Thank Burlington for the Trees
Which Protect and Soften the Prairie Land
Along Its Lines in Kansas, Nebraska, Wyoming and Arkansas

more than 9000 miles of track from Chicago to St. Louis to Minneapolis, Omaha, Kansas City, Denver and Billings, Montana; and they control the Colorado Southern for rail route from Wyoming through to the Gulf of Mexico, making a total of 14,000 miles in 14 states.

The CB&Q's early colonization activities were not dissimilar from those of other roads operating in the same territory. Among the cities to which it gave impetus or added growth, the Big Q lists Kansas City, Omaha, Denver, Minneapolis and St. Paul. The sale of Burlington land began in 1860 when the Hannibal & St. Joseph published an elaborate 60-page booklet which attracted emigrants from Iowa, Minnesota and Wisconsin. By the end of 1870, almost 80 percent of the land in Missouri had been sold.

Sales in Iowa and Nebraska were largely confined to the decade between 1870 and 1880. Four-fifths of the land, 2,273,885 acres, were sold to 20,000 purchasers. From 1880 to 1905, the

All photos from Burlington Lines

Missouri metropolis, cira 1890. A station, hotel-restaurant, general store and grain elevator were the requisites of the prairie oasis; a railroad, the tap-roots which gave it life

CB&Q disposed of the balance of its land-grant acreage, and turned, with something of relief, if the records can be trusted, to the "larger part" of the colonization process—the vigorous support and promotion of agriculture.

As early as 1854 the Hannibal & St. Joseph had hired land experts to appraise the agricultural possibilities of northern Missouri and make a special report to the Board of Directors. Land Agent Charles Russell Lowell, a nephew of the famous New England poet, was querying farmers in Iowa about their harvests, their soil problems and methods of cultivation in 1858, before the railroad had sold any land or built more than 50 miles of track. When the Civil War cut off vital cotton supplies from the South, the Burlington's Iowa Land Commissioner eagerly responded to the request of the United States Department of Agriculture and distributed cotton seed free to midwestern farmers. By 1870, when colonization began in earnest, the road had compiled much valuable data on crops and livestock and was able to furnish prospective settlers with samples of local corn and wheat to prove what the soil could do.

Today, passengers on any of the Burlington's Nebraska lines see at a glance from the car windows living evidence of the railroad's early conservation activities. One of the most important of these was tree planting. Luxuriant growths of honey locust, cottonwood, willow, maple, ash, box elder, Norway spruce, Scotch pine and European larch line the cuts and embankments, serving to keep snowdrifts off the tracks, prevent soil erosion and beautify the landscape.

The idea of planting trees came to Colonel Thomas Doane, the Burlington & Missouri's first superintendent and chief engineer, in the spring of 1871 when a heavy snow storm temporarily blocked service on the uncompleted Plattsmouth-Fort Kearny line. A nursery owner at Crete furnished the colonel with an emergency crew of laborers to help clear the line and in the process convinced him that trees strategically located along the right-of-way would prevent such heavy drifting in the future. In addition to providing valuable windbreaks for the rail-

road, the Burlington's groves, Colonel Doane foresaw, would encourage settlers to plant trees on their bare prairie farms. Such private woodlands would eventually provide a source of crosstie timber.

According to the Brownville *Advertiser* and other local papers, tree-planting was amusing to a good many Nebraska landowners. Following the fashion of their day, they referred to the plan as "Doane's folly." The Colonel shrugged off their derision and directed Peter Youngers, a Geneva nurseryman, to proceed with the plantings. The first plantings were made two years before the Government passed the Timber Land Act and three years before Governor Furness proclaimed April 8, 1874, as Nebraska's first Arbor Day. A year previously the railroad had planted 560,000 trees of various kinds along its right-of-way. A legislative act in 1895 nicknamed Nebraska "The Tree Planting State."

At various points along the line the CB&Q had set up its own nurseries in order to persuade incoming settlers to plant trees which would conserve their land. Thousands of such trees were donated to new settlers and many older farmers, among them those who had scoffed at "Doane's folly", came eagerly for trees to protect their farms from the ravages of weather and erosion. Free gifts of trees were continued up to 1881, and even later, in Nebraska, the railroad planed several large catalpa groves as a source of fence posts for farmers and tie timber for itself. Around 1927, the United States Forestry Department in conjunction with the Nebraska, Colorado and Wyoming Colleges of Agriculture asked the Burlington to cooperate again in promoting tree development on western farms. Starting in 1928 and continuing for five successive years, the road planted 120,000 trees along its right-of-way.

FROM THE first, the Burlington's Land Department was alert for new developments in crops which would increase the value of its vast Nebraska holdings. Believing that alfalfa, originally brought by Spaniards from Europe into Chile and from there to California, could be grown successfully on the raw prairie land, the B&M introduced seeds of the new "grass" into Nebraska as early as 1875. The scheme was to give 2½-pound packets of the seed to every farmer who would promise to sow it and report on its growth to the B&M office at Lincoln. The Agricultural College was induced to experiment with the new crop. On viewing the results, local newspaper editors commended the B&M for "progressive action." Governor Furnass sowed alfalfa on his own farm, and wrote the Land Department of the railroad, requesting more seed.

Alfalfa hay from these early plantings was exhibited at the state and county fairs, pamphlets were published giving detailed information on its growth, and in 1895 the Burlington conducted a campaign in its own magazine, *The Corn Belt Farmer* to promote alfalfa as a land builder and cattle food. In 1913 when J. B. Lamson was employed to establish the railroad's first formal Agricultural Department, he immediately embarked on an intensive distribution of pamphlets and circulars to popularize alfalfa further, and organized a special educational train to tour Nebraska and Colorado with exhibits featuring the cultivation of alfalfa. A series of meetings, 281 in 55 towns, were held to interest farmers, more than 12,000 of whom attended and received the free seed distributed by the railroad's lecturers and demonstrators. To encourage trial plots among farmers who did not want to devote their own acreage to hay, the railroad leased unused portions of right-of-way free to adjacent landowners for alfalfa sowing. More than 600 such leases were granted early in Lamson's campaign, and more than half of them are still in use. Nebraska's position today as the world's leading alfalfa center is due to the Burlington's persistent promotion of this valuable farm product, the name of which comes from Arabic, and means "best food for camels."

Early settlers in the western part of

Sod hut but no feet of clay. This proud family believed in God, itself, and the Burlington; asked only for kindly weather and an outlet for the products of hard toil. The railroad didn't let its immigrants down

the state found the soil and climate well suited to potato growing, but they were hampered by insufficient knowledge of potato culture, inadequate storage facilities and lack of a large market. The railroad was soon assisting them not only in broadening the market but in improving potato production methods. In 1916, when the State Agricultural College formed the Nebraska Potato Improvement Association, the CB&Q was behind them with a demonstration car which visited 27 towns in potato regions. Nearly 4000 farmers saw the exhibits, listened to the lectures, and received ten-pound bags of high quality seed potatoes donated by the Burlington for future planting. Later, this demonstration car was loaned to the C&NW and the UP for operation through the potato-growing counties along their lines.

In 1926 the Burlington prepared a special train composed of 70 cars carrying western Nebraska products, and including 40 cars of certified and high-grade seed potatoes, which operated from Alliance, Nebraska to points in Louisiana. This project, which was sponsored in conjunction with the Kansas City Southern and several associations of potato farmers, resulted in excellent publicity for Nebraska products, received more than 600 extensive comments in newspapers and magazines and greatly increased the potato market. Later, in order to demonstrate the superiority of Nebraska seed potatoes, the CB&Q arranged tests in Missouri, comparing the yield of Nebraska potatoes with that from local seed. Similar tests were made in the South and in Cuba through the cooperation of the Gulf, Mobile & Northern which shipped seed bound for Cuba to boats in Mobile, Alabama.

Along with these larger projects for the promotion of potato culture, the road held a continual series of educational meetings and tours. It conducted numerous school house and track team demonstrations on the proper handling of potatoes for shipment. Informal booklets, circulars, and books were distributed free throughout Nebraska, Colorado, Wyoming and other farming states.

One of the best illustrations of what the Burlington did to develop the West was its work in starting and stimulating the important beet sugar industry in the semi-arid regions of Colorado, Nebraska, Wyoming and Montana. Much of this land has but recently been reclaimed from the desert by irrigation. In 1925, the Great Western Sugar Company asked the railroad's help in teaching the farmers on the lands adjoining its refineries improved cultivation methods. CB&Q immediately organized a Sugar Beet Special which held meetings at every dump and factory site in the area, with demonstrations of proper planting and spacing methods, cultivation and irrigation techniques. Lectures were given in Spanish and German, as well as in English. A total of 53,444 people attended these meetings, representing at least 85 percent of all the growers in the area.

The result of the campaign was more money in the pockets of the beet sugar growers, the railroad and the sugar companies. Total acreage of beet crops jumped from 171,255 in 1925 to 301,492 in 1927, and by 1929 had reached 408,000. The average yield throughout the territory was increased by two to three tons per acre over the average yield of 11.2 tons for the ten preceding years. In the North Platte Valley the yield had been less than 12 tons per acre in 1924; after the Sugar Beet Special passed that way the figures jumped to 16.7 tons per acre on 52,957 acres.

The Sugar Beet Special, consisting of three exhibit cars and two meeting cars, was run in 1925, '26 and '27, and again in 1929, when two specials were sent into the sugar beet country bearing the slogan "More Tons Per Acre." The sugar refining companies of the West still conduct educational campaigns stressing the principles first publicized by the Burlington.

The grain crops, corn and wheat, form the basis of the Midwest's prosperity. Here, again, the Burlington has a long record of active interest in the promotion

and improvement of methods. In cooperation with the State College of Agriculture it has run many seed corn exhibit and lecture trains in eastern and southern Nebraska. In 1912, prompted by new discoveries in corn breeding and seed corn selection, it ran two Nebraska trains, consisting of three auditorium and two business cars, plus lecture and laboratory coaches in which farmers were taught improved corn breeding. Even earlier, the road had been instrumental in introducing into Nebraska, Colorado and Wyoming early maturing varieties of seed suitable for the climates of those regions. Again, in the early twenties, it offered free to farmers enough adapted "Minnesota 13" corn to plant two acres each. Seven hundred farmers in Wyoming's Big Horn Basin accepted the offer and by 1925 over 9000 acres of corn was flourishing in the basin. The first Wyoming corn show was made up of corn grown from stock originally introduced there by the Big Q.

FREQUENTLY, the railroad followed up its corn trains with silo trains, intended to assist farmers in obtaining the maximum benefits from the corn already produced. Even though silos were particularly needed in Colorado, Nebraska and Wyoming, where occasional drought prevented normal production of food crops for cattle, farmers in those areas were slow to adopt them for use. In order to sell silos, the Burlington sent its first silo train through eastern Colorado in 1913; later in the year another such train was operated in Iowa and Nebraska. The speakers were furnished by the United States Department of Agriculture and the Colorado Agricultural College. The silos built in the Midwest as a result of these efforts helped tide farmers over the critical drought years of 1934 and '36.

The Burlington has constantly implemented its original policy of finding and promoting new crops suitable to the land it serves. Its popularization of drought-resistant sorghums has been invaluable. Gifts of improved sorghum seed, soybeans, red clover and other legumes have brought priceless soil-building crops into general use throughout Wyoming and Nebraska. Back in 1874 the Burlington began its campaign for better quality seed; it began with the distribution of free seed to offset the ravages of the grasshopper invasion, and continued to insist on improved varieties throughout the years. In 1917, it set up a seed exchange clearing house through which more than 1,600,000 pounds of improved seeds have passed in one year's time to midwestern farmers.

In 1925 the Burlington began its long fight against wheat smut. In that year the plague cost Colorado farmers at least three million dollars. In many fields from one-fourth to one-half the crop was lost. By August, the Burlington trains were in the field disseminating the copper carbonate dust treatment. A special one-sided demonstration car was rigged up to display a mixer for treating the seed, and set rolling through the winter wheat district. It took siding for demonstrations and treatments in 55 different communities, with the result that four or five thousand farmers were induced to sow half a million acres of treated seed.

The following year another Wheat Smut Special rolled through 41 towns in Nebraska, Colorado and Kansas, reaching some 25,000 people. To re-emphasize the advantages of sowing only treated wheat seed a special composed of 70 cars of smut-free weat was run through Nebraska in 1927. The CB&Q followed these trains with news articles, letters and talks from 1928 to 1931.

Perhaps the oldest threat to the Midwestern farmer is the grasshopper plague. They remain a very serious problem. During the very dry years from 1932 through 1934 they descended in clouds on the territory served by the Burlington, eating food crops and stripping pasture lands, exposing the light topsoils to wind and water erosion. The railroad poisoned its right-of-way in the infested areas, thereby helping to combat the dangerous pest and at the same time demonstrating

Rare as Doric columns were the squared logs of this one-room Nebraska school. For the children and their teacher-marm lived in a treeless world until Colonel Doane set up his nurseries

effective hopper poisoning methods to the harried farmers of its territory. While sponsoring meetings on pest control throughout the state, Burlington greatly reduced its freight rates on grasshopper poisons, enabling farmers to buy a good deal more of the eradicator than would have been otherwise possible.

When corn root worms threatened crops in western Nebraska, Kansas and eastern Colorado in 1931, the railroad organized control campaigns in conjunction with the colleges of agriculture of the three states, held meetings and prepared colored posters showing the worm's life cycle and control measures to use at each stage. The Burlington placed these posters in store windows and in every public gathering place throughout the infested area. Similar measures have been taken in regard to the cricket, cinch bug, Hessian fly, alfalfa weevil and the numerous diseases of fruit, nursery stock, vegetable and farm crops. In 1934, when the potato psyllid struck in the North Platte Valley, the railroad moved spraying equipment free of charge throughout the region.

Livestock is only second to crops in importance to the economy of the midwestern states. The Burlington has played a star role in the development of superior dairy cows, poultry and hogs. The need for livestock to consume excess feed products and aid to farm income became apparent very early; but as late as the beginning of the century the state of Nebraska could boast few herds that were not of scrub stock. The annual butterfat production was much below that of states far less favorably situated for dairying.

In 1913 the CB&Q fitted up a special dairy train and with good representative specimens of Holstein, Jersey, Guernsey, Ayrshire and milking shorthorn breeds aboard visited 36 communities. More than 14,000 farmers viewed the specimen cattle and listened to the lectures of the Agricultural College experts who accom-

Some found temporary work with the railroad, grading the lonely land for trains that would reach still more distant horizons. When the man with the camera came they gathered their kinfolk together and lined up for posterity

panied the train. Later, in 1919, the Burlington had supplied 181 good cows to farmers in Nebraska, Colorado and Wyoming. Another dairy improvement exhibit car was operated in 1920, and by 1923 more than 931 good cows and purebred sires had been supplied to farmers along the line who wished to undertake the improvement of their livestock strain.

In 1924 the railroad joined with other interests in organizing the Nebraska Dairy Development Society. Otto Leibers, a former Burlington agricultural agent, was employed as full-time manager. Besides whole-hearted cooperation, the CB&Q contributed about $9000 in cash to this organization, the headquarters agency through which cow-testing associations were formed, high-grade dairy cattle were imported and information on dairy cow feeding and management was disseminated. To get the Dairy Development Society off to a good start, the Burlington operated a special purebred sire train which carried 31 excellent purebred bulls contributed by public-spirited breeders to exchange points where an equal number of worthless scrub bulls were collected and promptly destroyed. Following the formal exchange ceremony which was always a high point of the train stops, farmers inspected the exhibits illustrating good dairy management. More than 71,000 farmers viewed the exhibits, informative literature was distributed to the number of 100,000 pieces, and the publicity so well-managed that the state press devoted 18,000 column-inches to the project. An offshoot of this publicity was the special dairy train which the Burlington ran to Wisconsin, carrying 97 Nebraska farmers to study improved dairying methods.

AS A RESULT of all these efforts, requests were received for 54 purebred bulls and six carloads of high-grade Wisconsin cows to be imported to Nebraska. These shipments formed the beginning of a long series of importations of good dairy cattle. Within two years after the operation of the special dairy train to Wisconsin, Nebraska dairying sections had formed 16 calf clubs, organized 8 cow-testing associations, and imported 59 purebred bulls and about 1200 good cows. During the same period, butterfat production in these communities increased 37.5 percent.

In Colorado the Burlington worked jointly with the Colorado & Southern, the College of Agriculture, the Denver Union Stockyards Company, the Denver Chamber of Commerce and the purebred swine and cattle breeders to operate a purebred bull and boar train. At each of thirty designated stops a good bull and a purebred boar were exchanged for scrub stock. Some novel publicity stunts helped create interest. Prizes were given for guessing the weight of an enormous Poland China boar, and at various town halls humorous mock trials were conducted wherein some popular local stockman was charged with the "crime" of harboring a scrub bull. The train's motto was "Make Colorado Scrub Free", and its twelve cars contained clever charts showing a stockman's progress in moving from "Scrubville" through "Profit Town" to the city of "Prosperity." During the special's tour about $10,000 worth of purebreds were swapped even for $600 worth of scrubs. In the years that followed, scores of Colorado farmers wrote the Burlington, expressing their gratitude to the train that improved their stock.

One of the biggest boosts to Midwestern livestock was provided by the Burlington's Poultry Specials operated during the twenties. At first it had been easy to raise chickens in the newly settled country. But as the poultry population increased and yards became infested with vermin, disease attacked the flocks. Egg production went down and meat chickens grew scarce just at the time when advances in packing and refrigeration increased the market. Commercial flocks had always been rare and with farm flocks deteriorating, the whole territory was about to lose its poultry market to other regions.

The Burlington went to work to get poultry information out of the agricultural colleges to practical farmers and poultrymen. During 1926 and '27 it sent Poultry Specials to eight towns in Kansas, to three in New Mexico, to 36 in Colorado, to six in South Dakota and to 91 in Nebraska. Over 350,000 people inspected these trains, studied the exhibits and took alway literature on scientific poultry methods. Every train featured a 4-H Club poultry team which demonstrated poultry techniques and appealed particularly to the sons and daughters of farmers. One of the largest of these trains carried five cars of equipment plus four cars to accommodate the staff of 25 to 30 people engaged for lectures and exhibit duties.

A major reason for the success of the Poultry Specials was the enthusiastic work of local committees in raising funds to advertise the trains' arrival and provide entertainment for the gala day. Schools conducted poultry essay and poster contests, business men set up attractive window displays and more than half the towns had bands to welcome the Burlington train. To increase interest, local lumber dealers built standard brooder houses which were raffled off or given away as prizes, and entertainment committees arranged free shows, chicken chases, egg fights and various guessing contests.

Following the operation of the poultry trains there was a large immediate increase in the sale of poultry equipment. During the next year 620 new poultry houses were built in the area, 410 old houses were remodeled and 150 new brooder houses built. Feed dealers reported substantial increases in purchases of protein and mineral-rich feeds, indicating that farmers were feeding better balanced diets, and the railroad received increased shipments of eggs and poultry products from the region it covers.

The CB&Q also played a prominent part in building a profitable turkey industry in Colorado, Wyoming and western Nebraska. Up to 1923 turkey production in that area was barely large enough for local needs and the railroad had never received a commercial shipment that weighed more than 500 pounds. Soon after the Burlington cooperated with local associations to organize the Big Horn Basin Cooperative Marketing Association, ten carloads of turkeys were shipped out of Wyoming at 19 cents a pound. The next year the railroad worked to attract buyers, and the first ten carloads of Thanksgiving birds brought 31 cents per pound. Two years thereafter, turkey production had increased 126 percent in Colorado, 119 percent in Wyoming and 31 percent in western Nebraska. Turkeys now supply an important source of revenue to the area.

Nebraska's first 4-H Club was organized in 1904 with Val Kuska, CB&Q Colonization Agent, as a charter member. Sponsored by the United States Department of Agriculture and the extension services of the various states, the 4-H clubs constitute a powerful force for the improvement of agriculture, and the railroad has always cooperated with them to the fullest extent. From time to time Burlington has recruited championship demonstration teams from the ranks of 4-H clubs to accompany its special trains into farming regions. It has made regular gifts of improved seeds to the clubs for use in demonstration seed plots and awarded special prizes to Baby Beef Club winners. The veal served in Burlington dining-cars is always purchased from 4-H Club members. Every year the railroad awards prize trips to state-wide 4-H Club congresses to champion club leaders in each county in its territory. Between 1923 and 1932 the railroad contributed $6347 towards establishing the national 4-H Club Congress and Banquet in Chicago as an annual event.

The Burlington has missed few opportunities to support fairs and exhibitions which would publicize the products of its territory. In 1872 the road sent 30 large cases containing more than 600 specimens of Iowa and Nebraska-grown grains, fruits and vegetables on a circuit of Eastern fairs. For more than a quarter-century the Burlington's financial assistance was a large factor in the success of agricultural fairs and exhibits in Nebraska. It believed that these fairs accomplished a great deal in improving farm practices, disseminating information and advertising the region in other sections, and it made a policy of shipping all livestock and farm products to and from fairs and of providing very low passenger rates for those attending. Between 1875 and 1908 the CB&Q sponsored exhibits of products from Colorado, Montana, Nebraska and Iowa at fairs throughout the West and at important Eastern fairs. One of the road's Nebraska exhibits was selected for inclusion in the American section of the Paris Exposition in 1899.

ALMOST ALL the territory served by the Burlington is semi-arid. Early settlers coming from regions where rainfall was plentiful had considerable difficulty making these dry lands productive. G. W. Holdredge, the Burlington's General Manager of Lines West from 1884 to 1921, noticed that Hardy W. Campbell, a South Dakota farmer, was conspicuously more successful than his neighbors in growing wheat and potatoes. In 1895 the CB&Q hired Campbell to conduct a series of lectures in schoolhouses at the stations between McCook and Imperial. Free transportation was furnished farmers who wished to attend these classes in dry-land techniques. The following year, Mr. Campbell conducted a series of tillage tests at Hastings, Madrid and McCook in Nebraska and at Oberlin, Kansas, demonstrating the value of weed-free culture in dry-land farming.

Because of the shortage of accurate, timely information on improved farming methods, the Burlington took an excursion into the publishing field with *The Corn Belt Farmer,* a monthly distributed free to all farmers requesting it. Published from

1895 to 1901, this little magazine provided valuable tips on crops, soil, livestock and general farm management, and was particularly helpful in adjusting new settlers to midwestern soil conditions. Mr. Campbell's work in experimental farming was regularly reported on in the magazine.

In 1897 the Burlington began to establish farmers on a series of experimental farms located along its Nebraska routes. Under Campbell's supervision each farmer cultivated a 40-acre plot according to the new methods, which involved deeper than ordinary plowing and harrowing just after a rain in order to break the capillary tubes in the earth, allowing moisture to be absorbed and retained rather than evaporated. Results from these farms were so gratifying that the railroad employed Campbell for the next twenty years. While working for the Burlington he evolved what became widely known as the "Campbell System of Dry Land Agriculture", based on "reclamation without irrigation." Newspapers throughout the dry region lauded him editorially and thousands of dry-land farmers wrote letters of appreciation to him and the railroad.

By 1913 the Burlington had decided that it needed a permanent staff of scientifically trained agriculturalists. John B. Lamson of the University of Minnesota was appointed to organize and supervise the new Agricultural Development Department. During its first year the department distributed millet seed to 300 farmers in Kansas, Nebraska, Colorado and Wyoming in a movement that was largely responsible for the early success of this valuable crop. The next year it sponsored 76 demonstrations conducted by Mr. Campbell to promote Sudan grass, cane, millet, and feterita as forage crops. In addition, it distributed hundreds of soil augurs to dry-land farmers to encourage them to study the action of soil moisture. In 1915 and '16 the Agricultural Department conducted nearly 600 soil culture demonstrations in five western states.

Feeling that the job of educating farmers on soil culture was too big for the Burlington to handle alone, Lamson and Holdredge started a vigorous campaign to encourage the employment of county agricultural agents in Nebraska. They traveled through the state, conferring with county commissioners and agricultural societies. The objection most often advanced to the plan was the cost. To counter this, the Burlington offered to pay into the treasury of any county served by its lines a sum equal to $3 for each mile of CB&Q trackage, and this for two years, providing the money would be used to employ a county agent. In counties with less than 50 track miles, the contributions were set at $150 a year. Under the stimulus of this offer, Gage County employed Nebraska's first county agricultural agent in 1913, and received a CB&Q donation of $500. Three other counties followed suit, and by March, 1915, seven agricultural agents were operating in the state, all partly subsidized by the Burlington.

Business men were soon highly enthusiastic over the Burlington's county agent promotion plan, and a delegation of prominent Omaha merchants and bankers set to work to organize an Agricultural Development Committee for the purpose of assisting other counties in hiring agents. The railroad promptly subscribed $5000 of the projected $35,000 needed by the committee. Only $16,000, or less than half its goal, was actually raised by the committee, but the railroad paid its pledge.

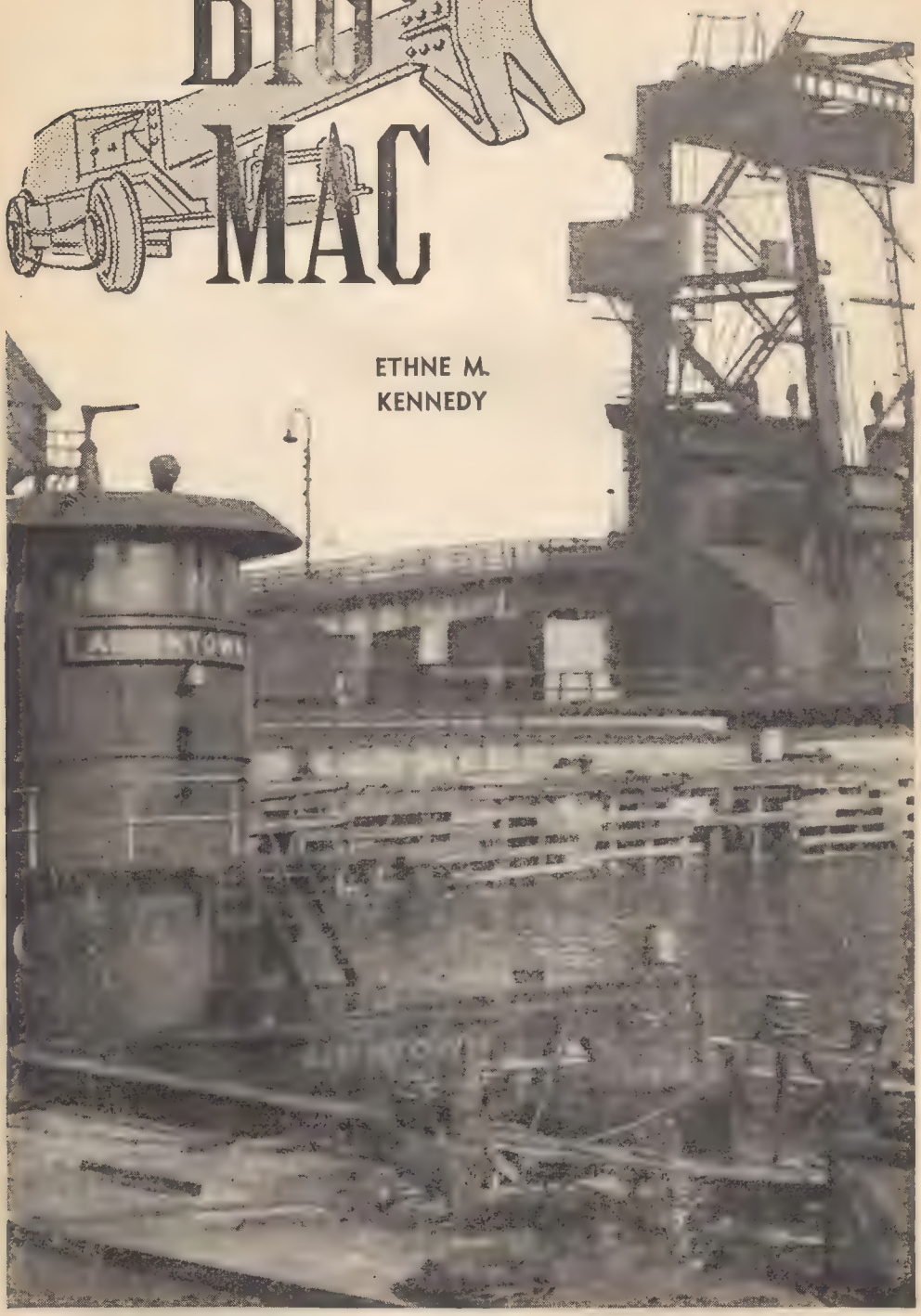
The Burlington Lines have never refused to contribute generously to any project which would benefit the region. In 1907, the Big Q gave one-third of a $3000 fund needed by progressive citizens around Akron, Colorado, for the erection of a government experiment station which has since rendered valuable service in advancing dry-land farming methods.

Multiply the service and generous cooperation of the Burlington by that of almost all the colonist railroads, and you begin to get an inkling of what the Iron Horse has done to make the country great and prosperous.

(To be concluded next month)

BIG MAC

ETHNE M. KENNEDY



BIG MAC is the Jersey Central's 32-year-old answer to one of the road's ever-present problems, how to transfer coal speedily, safely and economically from harborside hoppers to the holds of waiting ships. Astride Pier No. 18, a 900-foot quay extending into the Hudson River from the Jersey shore between Bedloe's and Ellis islands, this giant coal loader can tighten its steel grip on a 100-ton car of coal, raise and upturn it so as to slide its sooty contents easily into the broad pan of a telescopic delivery chute, and then dispatch the

empty hopper into adjacent yards—all in a matter of 50 seconds, if pushed to the test. On the basis of physical layout or the employment of the most modern methods available, Big Mac cannot be favorably compared with such postwar achievements as the Chesapeake & Ohio's $8 million conveyor-belt installation opened last year at Newport News, Va. Yet the millions of tons of coal poured out annually by Big Mac for the "Big Little Railroad" discount adverse criticism on this score: Big Mac is doing more than the job for which it was intended; under pressure it has adapted itself again and again to radical stepups in output without requiring any major changes in its initial design.

During a twelve-month period in World War II—1943, to be exact—Big Mac made shore-to-ship delivery of 19 million tons of coal. This was, of course, nearly four times its peacetime average, since the demand for coal even in the New York metropolitan area served by CNJ's Jersey City terminal is only seasonally heavy. In normal times the loader employing both its dumpers operates 20 hours a day in two 10-hour shifts during the winter; in the slack summer months one dumper is sufficient to manage the traffic while the second is being overhauled. The strain of winter operations is accountable for the large-scale repairs necessary each year.

Behind Big Mac stands a crew of thirty-four. Seven of these are responsible for operating the dumper itself, while the remaining twenty-seven are outside men —brakemen, boat loaders, trimmers and the like. Indoors or out, these men find the winter as hard a grind as does Big Mac. From December 26th until Easter Sunday, they work on 10-hour shifts seven days a week, after which the pace eases off to permit a holiday per week.

Below: **Big Mac's clam shell jaws open and coal roars through. Flow of black stuff is controlled from little house; operator can also swing dumper mouth north or south, inboard or outboard of barge. Five-section telescope will stretch from 9 to 45 feet**

All photos by Fullerton

Right: **Scene as McMyler Dumper overturns car, pouring coal into telescope, thence to barge at dockside.** ***Below:*** **Coal hopper on dumper cradle, ready to be up-ended**

Yet this is not the complete story. A bad storm like the blizzard of 1947 may so tangle up the yards that crews have to work round the clock to keep cargoes moving. Pier Agent C. A. Roth remembers one time he didn't see home for four days, when he slept in a business car alongside the office track until he had fought his way through the backlog of deliveries.

Yet Big Mac's crew leaves you in no doubt that the memories they share are worth the cost. Like Tom Cooney's picture of Pier Manager Wm. Flatley, a thick rope wound round his middle, stepping out onto the slippery steel pan below the windows of Big Mac's control tower, to hack away with a pick at the ton blocks of coal jamming the mouth of the coal chute, while the wind did its best to blast him off his feet and into the choppy river below. And just mention the night of December 26, 1947 and watch smiles spread across your listeners' faces. That was the night the snows began to fall, when engines beat their way across ice-blocked yards and cars were pushed downhill out on to the dumper lead with the hope that they wouldn't ride straight up to the top of the return ramp and out to sea. Fortunately for the CNJ and its clients no car has ever plunged off the kickback, but there have been several occasions when loaded barges sank at their moorings alongside Pier 18. And there was nothing the railroaders could do but watch them disappear, knowing they would be dragged up again days later.

Since the transport of coal represents 26 percent of the Jersey Central's revenue and one-third of the total hauled goes over the road to New York and its neighboring industries, it is easy to understand why Big Mac's activities are of prime concern to the owner. To keep hoppers moving to and from Pier 18 without interruption, the Jersey Central terminal possesses the largest yard in the metropolitan area, with space for 2800 loaded cars. In this it outranks even the Pennsylvania, Lehigh Valley, Delaware, Lackawanna & Western, Reading, and the Erie's harborside facilities. Barges lining up at its dockside serve ports in Connecticut and Massachusetts as well as

In the iron grip of Big Mac, a 75-ton hopper-load of coal is overturned toward the telescope pan. Pier 18 is distribution point for Bridgeport, Providence, Lynn, Salem and Boston as well as Greater New York

New York, and during World War II some French and Irish freighters filled up with cargoes for markets abroad. All this helps to make Pier 18 one of the most active loaders on the Atlantic seaboard. North of Philadelphia its rivals are South Amboy (Rdg.), Perth Amboy (LV), Port Reading (Rdg.) and Hoboken Coal Docks (DL&W).

AGAINST a backdrop of Manhattan skyscrapers, Big Mac's 90-foot structure is in no way remarkable. Climb up 55 feet to its control tower, however, and you'll find a vantage point high enough to provide not only a clear view of the proceedings near at hand but of the terminal's general plan. With your back to the Hudson, you look down upon nearly a hundred tracks. About a dozen of those straight ahead are lined up in the direction of the loader and these narrow to four as they approach the pier's end; two wooden sheds straddle six of them not far in the distance. To the left is a substantial brick building with a tall stack, obviously the powerhouse; tied up at the dock in front of it are several freshly-painted CNJ tugboats. To the right, barges of every description lie motionless in the protected river basin, while directly below a Tracy tug berthed between two scows impatiently blows off steam.

Since the average day at Pier 18 sees the loading of from 21 to 24 barges, which vary in capacity from a Burns 72 holding 470 tons to one of Tracy's new 2040-ton steel leviathans, the adjoining basin always has occupants. Time meaning money both to the consignee and the carrier, schedules are kept tight, and to avoid delays there is mooring space for 80 vessels in the basin. As a rule not more than five minutes elapse between the departure of one boat and the arrival of the next. For the loading job does not end when the coal-heavy barge drifts off from the loading chute, propelled by a stiff wind or the pier-based motor.

Before any vessel is deemed seaworthy, trimmers must level the loose coal and cover the hatches. Anthracite generally runs swiftly into all corners of the hold but bituminous piles up and must be battened down before the vessel can safely leave the harbor. Since carload traffic at Pier 18 is about equally divided between these two, you see a number of loaded barges docked nearby, awaiting trimming. The eight-foot decks of old-time scows call for fifteen men to complete this wearisome chore. This is one reason why the design for new Tracy boats features a four-foot deck.

Below you is a weather-beaten scow christened *The Hawk*. Let's follow a load of coal from the yard into her hold and watch Big Mac in action. It is important to understand, however, that this McMyler loader, which performed its first day's work for the CNJ on July 1, 1919, is only the strong arm in a complex system of classification yards, thawing houses, steeply-graded lead tracks and kickbacks, barneys and more. To keep coal flowing in a steady stream from the mines of Pennsylvania's Blue Mountains to CNJ consumers requires a combination of many efforts.

Baltimore & Ohio, Reading, Western Maryland—these are the names most frequently stencilled on the hoppers appearing in the Jersey City yard. Let's concentrate on B&O No. 434623—you will recognize it in a couple of the accompanying photographs—and trace its trip to the dumper. Office arrangements having been completed, B&O 434623 rolls by gravity down the track leading to the barney pit, a brakeman riding the top to prevent a possible runaway. Once at the pit a long-armed barney takes over.

Since this barney is controlled by Big Mac's tower, crewmen Brown and Tom Cooney enter the picture here. When Brown throws his lever, the eight-ton, counterweighted barney moves up behind the hopper, fixes a clefted ramrod against its coupler and then shoves the car up the steep incline to the loading platform. Steel cables grasp the hopper firmly. With a loud whining of gears the car begins to rise off the tracks and in mid-air is held toward the wide, open pan by which

Gates of the hopper mouth are closed as barge-load reaches capacity. "Trim" of scow has to be controlled carefully to prevent listing or overturning

Big Mac funnels coal into the barge below. To avoid unnecessary breakage, the car edge is brought right down to the apron or heel of the pan and the coal laid on. Even with this precaution clouds of coal dust mushroom up as No. 434623 is completely overturned.

Without delay Tom Cooney pulls a release lever and the car is righted before it drops back to the track. And while this B&O hopper was being put through its paces, the barney returned downhill and is up now with another load. This latter gives the empty a push that heads it down the track toward the river, where 434623 mounts a kickback giving it momentum enough for the journey back to the main section of the yard where it will be reclassified.

ALTHOUGH it's true that a 60- to 72-ton load of coal can be boosted up from the barney pit, hoisted into mid-air, dumped and then returned empty in 50 seconds, Big Mac's average is actually 20 to 25 cars per hour. One every two minutes is keeping them coming and going fast. The pressure for maintaining this schedule rests in good part on the towermen. A bit of poor timing could mean more than a poor showing; it could mean the breakdown of the dumper's equipment.

So above the noises of river traffic and the constant vibrating of their cage, the crewmen call signals for one another. "Right," barks Cooney. "Right," responds Brown. Brown is in complete charge of the barney, Cooney the actual dumping, but their functions are interdependent. As a loaded car lists precariously toward the pan, Cooney's eyes watch for the block under the dumper. The moment it strikes the cable he presses for release. If he didn't, the strain might prove too great for the cables. Should one of them snap at this point in the operation, the second would not be sufficient to support a 100-ton car. The return trip is less dangerous. If a cable should break then the straight drop would be only a matter of a few feet.

As a safeguard against accidents cables are checked daily. The pan cable is the largest, measuring about an inch and a quarter in diameter. Depending upon the time of the year they are installed, these can endure about a season's punishment. A cable put in during the summer may last until winter, while one set there in November may be worn out by the following January.

Not much less vulnerable are Big Mac's pan and telescopic chute. The former is protected by a false bottom or wearing-sheets, composed of ¾-inch plates of steel; this lining is replaced annually. Two to three years of being scraped by frozen chunks of coal rubs the cast-iron telescope so thin that a new one is compulsory. Like the apron of the pan which can be adjusted by a screw to compensate for changes in the tide and the varying heights of boats, the telescope is a most adaptable bit of machinery. Contracted it is nine feet long, but it can be stretched in five sections to a maximum 45 feet to meet the low levels of barge holds.

The pan of the dumper can hold 90 tons of coal. When anthracite is being poured, two carloads are dumped in the pan before the chute is opened. This allows the anthracite to pass through in a steady stream, instead of beating itself to powder. Breakage of coal, in a cargo valued according to a more or less uniform size, is a hazard. Another worry on Big Mac, fortunately only a winter problem, is the freezing of carload lots into solid masses.

Despite the efforts of the thawing sheds, it sometimes happens during a severe winter that coal may topple out of hoppers in 10-, 12- or 15-ton lumps. There is nothing to do then but get someone to go out on the pan and cut these chunks down to size with a lance or a pick. The telescope pan is equipped with lances, though these are intended primarily to clean out the telescope should coal become lodged there.

This drastic treatment is, however, the exception rather than the rule. During the cold weather cars enroute to the dumper are passed through one of two cement-walled thawing sheds if there is any suspicion of frozen coal. This usually occurs when the cargo consists of pea, buckwheat, rice, barley and other fine coals.

Each thawing shed has three stalls long enough to hold eight cars. Inside there is a lance platform with 144 outlets from which steam and vapor can be directed into the frozen coal. A railroader uses a wooden mallet to hammer about eight lances into each car. These eight-foot rods are perforated at the bottom to allow jets of live steam to pour out where they will do the most good. Depending upon the size of the coal and the length of time the car has been exposed outdoors, thawing will require about an hour to an hour and a half.

While this baking is going on, roller doors are let down at either end of the

The kickoff. No. 434623 gets the boot from loaded hopper brought up by tireless barney. Shove starts the empty rolling down to the kickback, which will give it momentum enough to ride back to the yards

The hard-working iron mule returns for another hopper to shove up the ramp. In background is basin in which 50 barges can await their turns at the dumper. "Tracy" on tugboat stack is name of fleet which handles main cargo around Pier 18

shed. Within the temperature rises to 150-170 degrees Fahrenheit, for in addition to the lance openings steam heat pours in through vents underneath the cars, which number about 50 per stall. These ducts are protected against blocking by coal by wire screening. To create this inferno eight miles of piping were laid in each building, and 12-foot fans make certain that the hot air is kept in circulation.

As might be expected the tremendous heat dries up the car journals. When it is time to transfer the cars to the lead track, power is needed to start the stiff wheels rolling. Each shed track is provided with a steam winch for this purpose. Lying between the tracks, it can be linked onto the cars and force applied. Not until the hoppers are moving freely is the hook on the end of its wire cable loosened from the hoppers.

One last precaution against trouble high up on Big Mac is the series of oil pits on Track 57 outside the defrosting units. The oil pits are used only in emergencies due to extreme cold. Then oil blowers can turn the heat on cars from either side of the track.

THE ORDER in which loaded hoppers travel down Big Mac's lead is the result of careful yard reporting and office planning. Without this the Jersey Central could never offer the consignee the service it does. This involves not merely the meeting of barges on tight schedules, but loading them in whatever manner stipulated; and when it comes to packaging barges for market, coal merchants can be good salesmen. Thus Pier Agent Connie Roth receives orders for the loading of a barge with a large tonnage of a certain type of egg coal to be topped by a hopperload of Primrose, an exceptionally good run. Just like putting the choice berries on the top of the box.

At present 72 shippers employ Pier 18 and their bills show a total of 370 types of coal. Although the U.S. Mine Institute would hardly recognize this number, CNJ's account books attest the fact. For on the carrier's records every grade of coal from every mine used by a shipper must appear as a separate class and be handled accordingly. This both complicates the bookkeeping and requires added shuffling when strings of loaded cars arrive from the mines.

Sorting the hoppers in the classification yards is called "drilling coal." The first division is determined by whether the cargo is anthracite or bituminous, which relegates the car to A or B yard, after which each consignee's cars are graded according to quality. Before a day passes a car, waybilled into Jersey City on a long drag, is ticketed by a car checker whose driller's check goes to the pier agent. Roth's office takes over then, notifying the shipper each day of the arrival of cargo. The next move is up to the dealer. Nothing more can be done until he phones the agent as to when his barge is to be loaded, giving in detail the type of coal, the tonnage and the name of the ship.

CNJ submits a written report to its clients every 24 hours, individually noting the arrival of each car, with its weight, class of coal and from whence it's come. This statement forms the basis for demurrage charges should a client be tardy in carting off his cargo. Five days is the accepted limit for storing anthracite in the yards, six for bituminous. When an order does come through to get coal rolling, one of the desk men records the message and a copy of this order goes to Yardmaster Penetti, whose shanty stands near the mouth of the yards and the entrance to pier trackage. The original is kept by the man handling the A or B account for the shipper.

Penetti puts the coal on the hill, and so the cargo is dispatched to the waiting ship. The agent has a checker on Big Mac to record the numbers of the cars as they are emptied and meanwhile the cardboard tag from the driller has been put on file in the office. A tipple check comes from one of the yardmaster's men and the man on duty on the dumper turns in another when his trick is over. The two are compared, for they must tally with

View from towerman's window with a car on the steep incline approaching Big Mac. A brakeman rides every car to the top and back into the yards

The thawing sheds, without which Big Mac could not operate in winter. Each stall holds 8 cars. Maze of tracks at Pier 18 includes six for classifying cars according to which road or mine they are returning to

A or B records before the item is listed on the large yellow sheet controlling a shipper's account. At the end of the day a bill is forwarded to the consignee.

With all the coal Big Mac pours out each day there are a good many carloads the dumper never sees, without which it would be powerless. Winter and summer fires rage in the powerhouse furnace, consuming from one and a quarter carloads daily in off months to three cars daily when the rush is on. Four boilers are worked all summer and twice that many in the winter to provide compressed air for the yards, main lines, dumpers and marine works, as well as steam for the dumpers and the heating system.

In the powerhouse, too, are the wires which bring in AC current at 2300 volts. This current is then passed through transformers that step it down to 550 volts, when it can be converted to DC for use in the various motors on Big Mac and out in the yards. One vital draw upon this electricity is the two-way radio network linking Yardmaster Penetti's office with the far corners of his domain. Loudspeakers carry messages to the crews checking the cars, and microphones placed in the field make it possible for conductors to phone the dispatcher when their trains are ready to depart from Jersey City. This avoids considerable delay in the obtaining of running orders and makes possible the speedy dispatch of empty hoppers back to the mines.

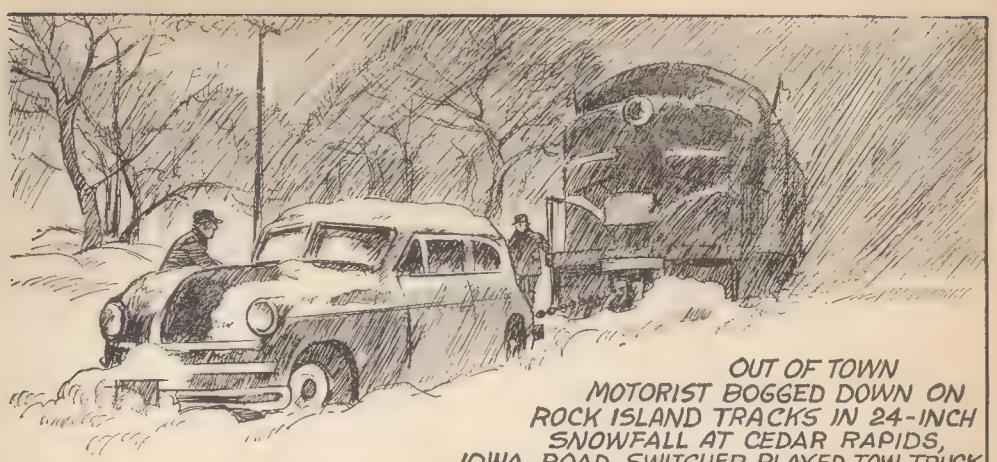
As long as there is coal to be mined and transported at a profit Big Mac will probably be kept busy lifting and dumping coal cars. Sometimes strikes have cut down its working hours, even halting operations occasionally; but such breakdowns only serve to emphasize its extraordinary adaptability. So far Big Mac's ability to stand up under burdens of increasing traffic and the pressures of wartime demands for fuel is a feat suggestive of one of railroad's greats—that mighty human, John Henry. Should Big Mac be scrapped tomorrow it would not change the fact that down at the railroad yards within shadow of the Statue of Liberty the mighty dumper is on its way to becoming a bit of a legend.

ALONG THE IRON PIKE

by JOE EASLEY

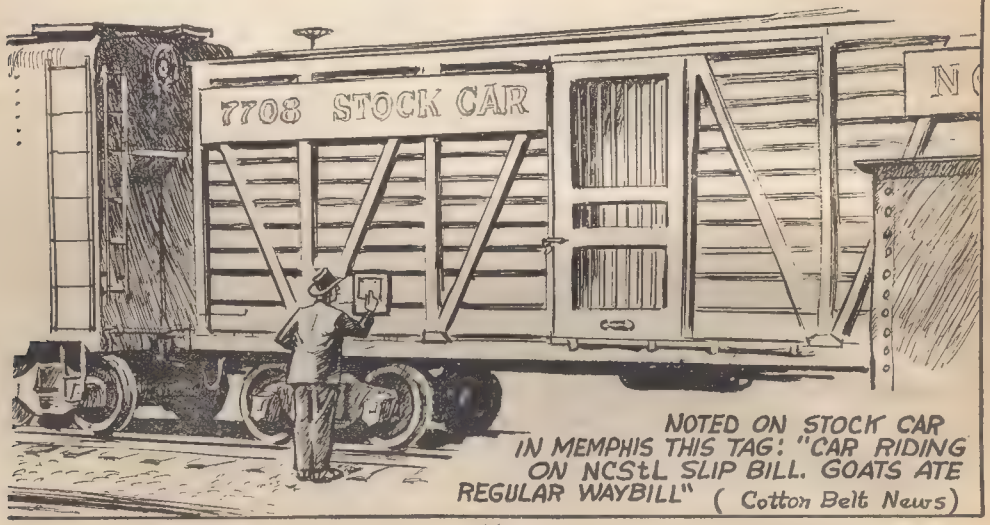
CLARENCE BROWN TRAINED SON JOHN SO WELL, HE IS NOW FATHER'S BOSS IN PORTLAND, ORE., AND YOUNGEST DISPATCHER SOUTHERN PACIFIC EVER HAD (Charles A. Roach)

CHICKEN AND RICE-- SOUTHERN STYLE-- IS PROBABLY ON CABOOSE MENU OF THIS SOUTH KOREAN BOBBER, COMMANDEERED BY UN TROOPS WHO ONCE WORKED ON SOUTHERN RAILWAY (TIES --- Southern Railway employes' magazine)



OUT OF TOWN MOTORIST BOGGED DOWN ON ROCK ISLAND TRACKS IN 24-INCH SNOWFALL AT CEDAR RAPIDS, IOWA, ROAD SWITCHER PLAYED TOW TRUCK LONG ENOUGH TO CLEAR MAIN (Fred C. Hanson)

BIG CATCH AT SLATE CREEK NEAR WELLINGTON, KAN. THE GRAND CANYON, 16 OTHER TRAINS WERE STOPPED WHEN FISHERMAN'S LINE SHORT-CIRCUITED SIGNAL SYSTEM GIVING RED LIGHT TO ENTIRE PAN-HANDLE DIVISION. FISHERMAN DIDN'T STICK AROUND TO CLAIM HIS HAUL (Ted Senchagrin)



NOTED ON STOCK CAR IN MEMPHIS THIS TAG: "CAR RIDING ON NCStL SLIP BILL. GOATS ATE REGULAR WAYBILL" (Cotton Belt News)

BRACING THE BOILER

DETAILS of design and construction of the locomotive boiler are little understood by the average engineer or mechanic. They may know, in a general way, about the calculation of sheets and even the external bracing, which can be seen; but what there is inside the shell, other than tubes and staybolts, is something of a mystery.

Because there have been very few shell failures, it is assumed that drawing-board figures are nearly always within safe bounds. What defects do show up after a short period of service are due mostly to poor workmanship on the part of the boilermaker. The work can hardly be inspected after the boiler is once assembled; therefore the most thorough observations must be made during the process of fabrication.

When it comes to establishing the thickness of the sheets with which the shell of the boiler is constructed, the job is simplified to a certain extent by the fact that federal law requires that the steel used shall be capable of withstanding a head of steam equal to four times the working pressure. This factor of four, as it is called, has proved over the years to be a safe one, the quadruple strength allowing little danger of failure even though the engine is worked to capacity for long periods of time at high evaporating rates; and even though the safety valves do not always relieve the pressure right on the dot.

It might appear that a safety factor of 2 would be enough; an allowance for twice the load for which the boiler is designed would seem to be within safe bounds. But before coming to a final conclusion, there are other factors which we must know about the nature of steel itself.

In ordinary boiler steels, which are of low carbon content, the tensile strength runs about 60,000 pounds to the square inch, meaning that that much force is required to pull a strip of the metal apart. This is important; but a more significant factor, and one which has a definite relationship to strength, is the elastic limit.

Though a highly elastic substance, like rubber, will return to its original size and shape after being stretched, unfortunately this is not true of steel. Steel possesses elasticity to some extent, but when stretched beyond a certain point its structure yields, the metal pulls apart and when the strain is relaxed the length of the piece has increased. Not only will it never return to its original size, but the sheet is not as strong as when it was rolled.

A SECOND weakness of steel which must be taken into consideration is the fact that with increase of temperature, tensile strength drops. As long as water is in contact with the sheets, even with a firebox temperature of 2500 degrees the plate stays comparatively cool, since at 200 pounds pressure water temperature is not over 388 degrees. But during the life of every boiler there are numerous occasions when the water level cannot be maintained, and when this happens the dry steel becomes hot and weak. When heated to a cherry red, ordinary steel will resist a pressure of only a little over 9000 pounds per square inch. Above that it acts like a twist of molasses candy stretched beyond the limit of its elasticity: it suddenly falls apart. A boiler explosion results when a large volume of water immediately turns to steam as the pressure is released through a rupture. But with

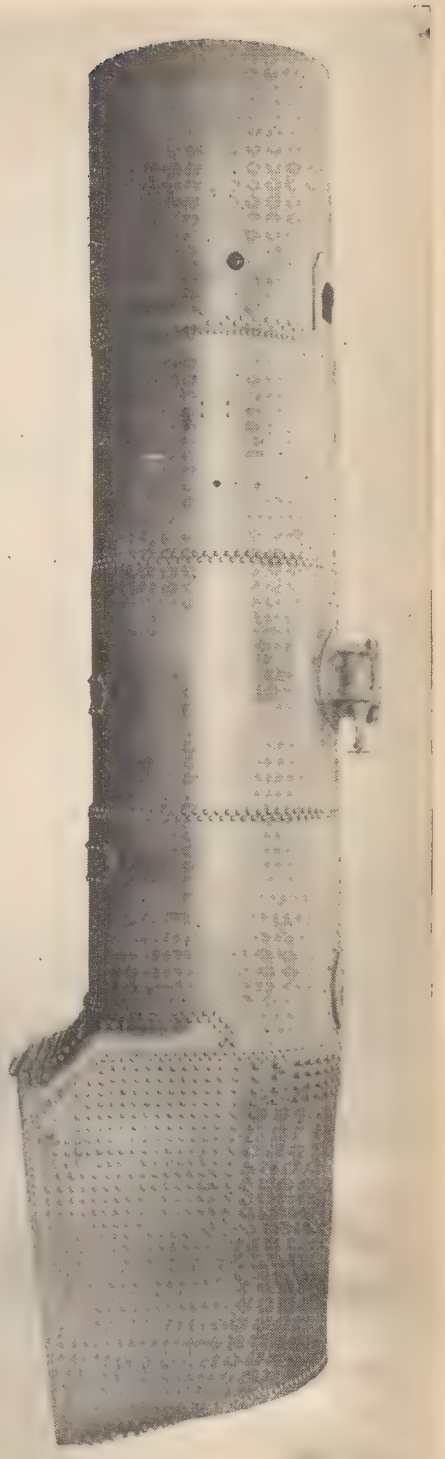
the safety factor of four, under ordinary circumstances all this is prevented.

As important as sheet calculation is the matter of internal bracing by means of the staybolts and crown stays already mentioned. These may be either rigid or flexible and are generally spaced about 4 inches apart. Because they are subjected to numerous stresses other than those caused by pressure, ICC requirements allow not more than 7500 pounds to the square inch, which means a safety factor of about 8. It is not uncommon for some of these bolts to break between monthly inspections, therefore those remaining must be capable of withstanding the added strain.

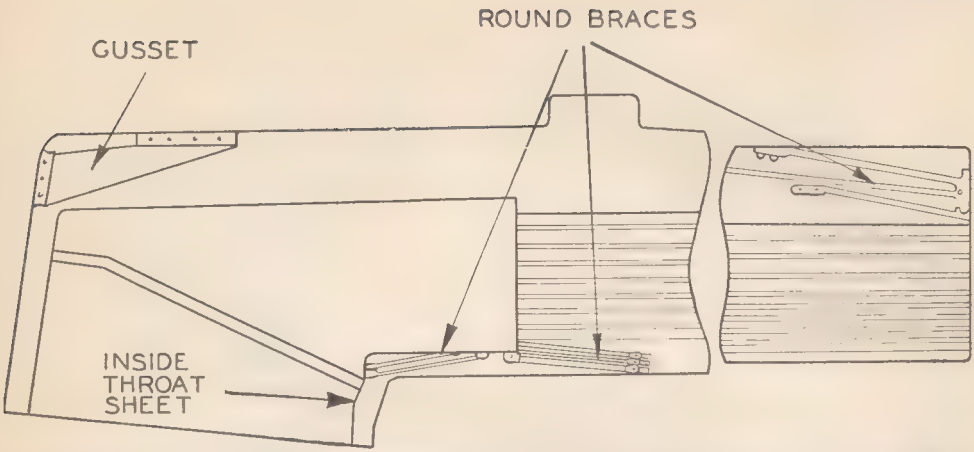
In our first drawing (page 58) we see how the other parts of the boiler are braced. The front tube sheet is held secure above the flues and so is the back head. The firebox, at the combustion chamber, is firmly anchored at both ends. One set of braces go to the inside throat sheet, while the others run from the base of the rear tube sheet to the lower shell sheets. These braces may be either round or of gusset design and must not be subjected to a strain exceeding 9000 pounds per square inch.

The detail of the round brace is shown. It is by far the most commonly used and the easiest to apply. Generally it will last the life of the boiler without failing. As all boilers "breathe," there must be flexibility to this brace, and to obtain this it is applied at an angle by means of a pin, with the other end firmly secured with rivets.

But sometimes it is difficult to apply this type of brace and where there is limited space the gusset is used. At the back head where the braces must run between numerous crown stays it would be hard to apply the usual round stay. Here the gusset is readily adaptable. This is simply a piece of boiler sheet cut to shape so that it can be attached to an angle iron at each end. This brace is very rigid, but it functions well and seldom fails.



Smokebox, three-section boiler shell and firebox

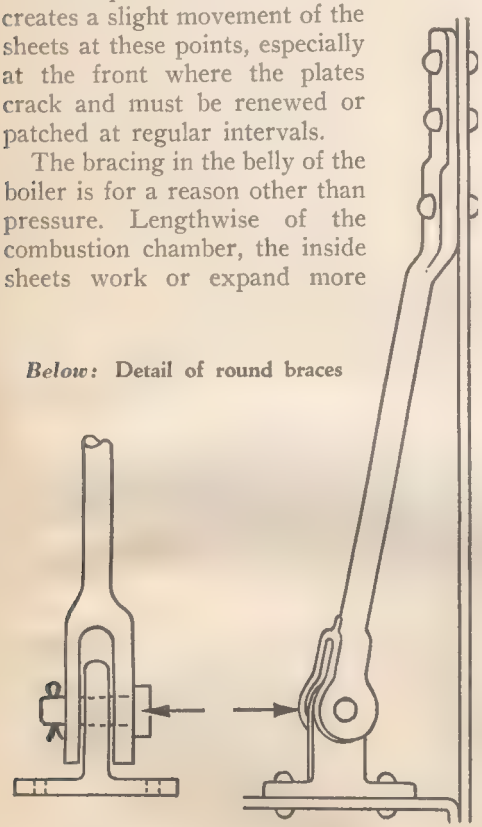


Above: **Front tube sheet and backhead are held secure by round stays. Firebox is anchored front and back, one set of braces going to inside throat sheet, the others running from rear tube sheet to lower shell sheets**

AS TO why braces must be applied at the front tube sheet and the rear head; above the water line there would be a bulging if some strengthening were not incorporated. As it is, the pressure creates a slight movement of the sheets at these points, especially at the front where the plates crack and must be renewed or patched at regular intervals.

The bracing in the belly of the boiler is for a reason other than pressure. Lengthwise of the combustion chamber, the inside sheets work or expand more than the outside shell and if they were not secured at these points the staybolts would continually break or leak at the threads due to the forward and rearward thrust.

Below: **Detail of round braces**



When we are ready to apply a completely fabricated boiler to the engine frame, another ticklish problem comes up. At the front end where the smoke arch is firmly riveted to the shell itself, the former is thoroughly secured to the cylinder saddle. Stout bolts, perfectly machined, are fitted into reamed holes and nuts are applied with long wrenches until these parts become almost one. As the boiler reaches its working pressure, the metal, of course, expands, but because it is firmly anchored at the front end it can move in only one direction—rearward. A large boiler will expand a full inch overall and provision must be made for this. In fact if we tried to prevent this movement by securing both ends, something would have to let go somewhere. It has happened that the circumferential seam rivets have been sheared off when because of some defect in design the normal expansion of the metal was prevented.

On the first locomotives the exterior bracing was taken care of by means of waist sheets, and to this day the same type of support is used forward of the

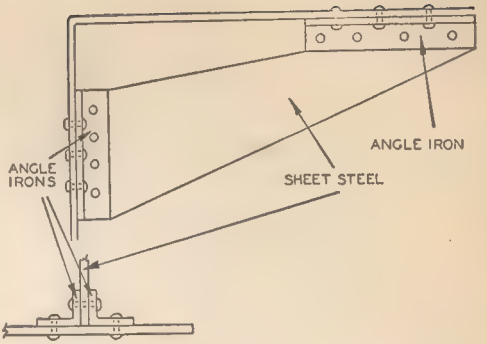
firebox. The lower parts of the sheets are attached to filler castings set between the right and left rails of the main frame. At the upper end there is an angle iron shaped to the contour of the boiler in which the belly of the boiler rests. Formerly this angle iron was secured to the shell by numerous studs, but as this caused leakage and eventual cracking of the metal at the outer studs, the practice developed of simply allowing the boiler to rest, unattached, in the curved angle irons, like building a house on a foundation without attaching it to the stone work.

At the front and rear of the firebox, problems arose that demanded numerous changes and it has only been in recent years that anything like perfection has been obtained. These points, where the greatest expansion occurs, now play an important part not only in minimizing boiler maintenance but in allowing for smooth riding engines.

WHEN THE wide firebox was found to be necessary for the coal-burning locomotive, the bracing at the front and rear of the mud ring was similar to the waist sheets; that is, it was nothing more than boiler sheets about ¾ inch in thickness. With a few years of service and the continual expansion and contraction, the metal cracked and sometimes failed completely. Lamination of these furnace bearers was then attempted and proved very satisfactory. With three thin sheets instead of the single heavy one greater pliancy was obtained. The cracking stopped, but the design still was far from being satisfactory on the extremely heavy power.

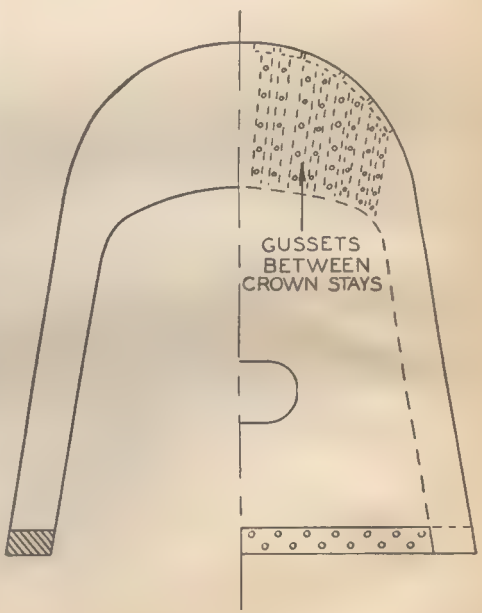
Today we have what is known as an expansion pad at the four corners of the mud ring. This construction dates back to the days when the narrow firebox rested between the rails of the main frame. Then there was attached to the sides of the wrapper sheets a sort of shoe with a flat surface at the base. This rested on the frame, carrying the entire weight of the rear end.

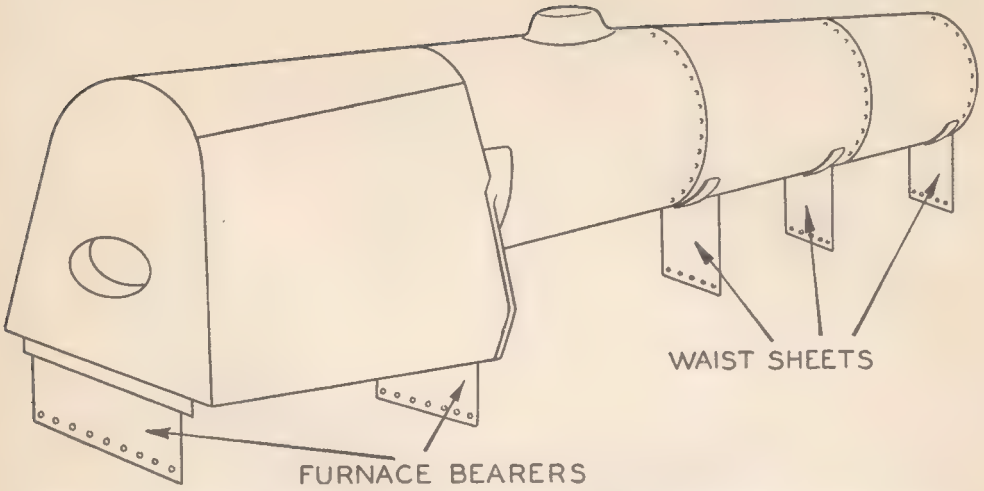
Although this design allowed for the free movement of the boiler, another difficulty developed at high speeds in modern service. There was a tendency for an up-and-down movement which caused hard-riding engines; the vibration in the cab ruined gages and pipes. A further improvement was called for. Instead of just allowing the boiler to rest on the frame, the idea of making a guide with upper and lower sections was conceived.



Above and Below: **In limited space, gusset-type brace is used. It is simply piece of boiler sheet riveted to angle irons at each end**

Because the movement was slow and somewhat infrequent no thought was paid to lubrication, but with months of service the rubbing faces galled and sometimes "froze." It was then learned that this

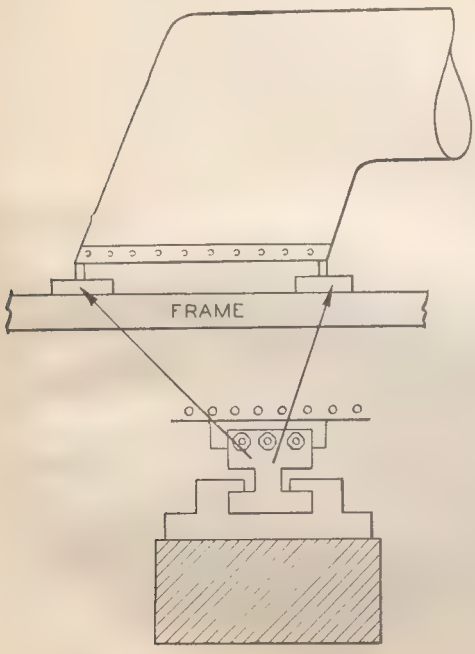




Above: **To allow for expansion, boiler belly rests free in curved angle irons at top of waist sheets.** ***Below:*** **Expansion pad allows for rearward movement of firebox**

caused the riveted seams to leak. Lubrication of some kind was demanded.

At first the engineer was instructed to take care of this with his long oil can, but that was not enough. Later, an oil cup was applied and then Alemite fittings were employed throwing the job onto the roundhouse force. In the latest design the entire unit is encased and the wearing surfaces submerged in a bath of oil, allowing the freest of action. Tolerances can be kept very close, with hardly any up or down motion. As there is no leakage, one filling of oil lasts many months. Enginemen praise these expansion pads, for they eliminate much of the rough riding and allow for trouble-free performance insofar as the boiler is concerned.



WITH next month's Lantern article we will bring to a close the series of technical pieces on the steam locomotive which have been appearing intermittently in the pages of this magazine for the past several years. The series has gone into such a variety of subjects as tire-setting, steam-drying, driver counterbalancing; the complexities of valve gear, air pumps, headlight generators; the how-to of sludge removal, injector economy, and many others. We feel that we have given the iron horse a pretty thorough going-over. Beginning with the January article and continuing intermittently therefrom for a number of issues we want to take up the various aspects of Diesel locomotive operation and maintenance. As this form of motive power is still in its infancy, there is still much that remains to be learned about it, both from the operating and the maintenance angle, and we hereby offer this department as a clearing-house for ideas.

INFORMATION BOOTH

Each month the Lantern Department prints answers to rail questions of general interest, submitted by our readers. We do not send replies by mail.

Q *Steam locomotives and Engineer Bill Kennedy have been fixtures on the Putnam Division of the New York Central for many, many years. Tell me, what's this I hear about Diesels invading the Put?*

A Yes, the first Diesel, No. 5814, began operating this past summer over the single-track, coal-burning branch of the Central which winds its way from High Bridge in the Bronx up through the Westchester hills to Yorktown Heights and Brewster. The Diesel, borrowed from another NYC branch, is of the type that will soon replace the division's eleven steam locomotives. Engine crews are being instructed, one at a time, so they will be ready when nine new Diesels arrive, and a complete changeover will be made to oil. First crew to be trained consisted of your William J. Kennedy and Fireman William Mulk Jr., who formerly had been assigned to steam locomotive 1234. They took the 1:21 p.m. out of High Bridge for Yorktown with the Diesel on July 10th. The new Diesels are Lima-Hamilton 1200-horsepower road switchers, which, at 250,000 pounds, are comparatively light engines, well-suited to the small loads and sharp turns of the Putnam Division. The 4-6-0 steam engines, built in 1907, had hauled the *Twentieth Century Limited* when Kennedy joined the road in 1910. They may be scrapped, since the entire New York Central System will be converted eventually to Diesel. The change to oil is not expected to make any differ-

Bill Kennedy's *Ten-Wheeler* 1234 and ten other steam locomotives are giving in to Diesels on New York Central's quaint Putnam Division. Southbound train No. 1234, piloted by Kennedy, was familiar to valley residents in Croton Heights

Melvin Krampf

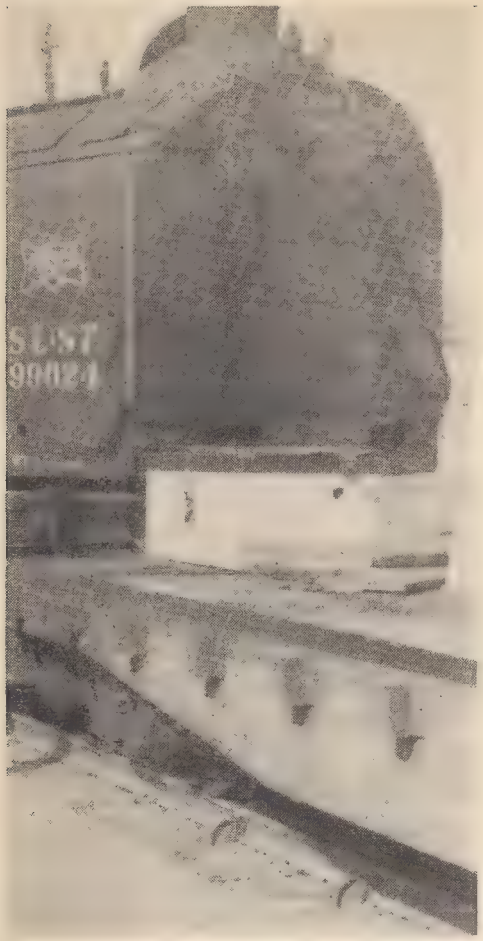
ence in present train schedules. The Put is also schooling its maintenance men so that they will be able to take over the Diesels, and the changeover will be quick and complete, avoiding the necessity of a transition period, during which two sets of maintenance and fueling operations would be needed. Founded in 1869 with the ambitious name of New York & Boston Railroad, the Put reached Brewster in 1880.

Q *Where was the Sperry rail detector car first used?*

A Dr. Elmer Sperry's rail-testing devices and detector car 102 and its companion unit, Motor Car 501, first appeared in November, 1928, at Montpelier, O., to fulfill a contract with the Wabash Railway for rail test service between Montpelier and Clarke Junction, Ind., in the Chicago area.

Q *What portions of the Frisco Lines have Centralized Traffic Control?*

A The St. Louis-San Francisco Railway has 667 CTC miles. On the St. Louis-Tulsa main stem, 386 of the 424 miles are equipped with CTC. The remaining 38 miles are double-tracked. On the main line, too, the heavy traffic Eastern Division, carrying through freight from Kansas City to Springfield, Birmingham and Memphis, is CTC from Springfield to Thayer, Mo., a distance of 137 miles. Eighty-seven CTC miles are on the



Frisco unloads CTC equipment at Marshfield, Mo. after placing shoring to ease side strain. Heavily-trafficked Eastern Division has 137 CTC miles

C. E. Boulson

Northern Division, between Fort Scott, Kan. and Afton, Okla. The Southern Division has 40 miles of CTC between Jasper and Birmingham, Ala. Last 17 miles of the road's CTC is between Madill and Lakeside, Okla. on the Southwestern Division.

Q *It surprised me in my younger days when I learned that railroads had gandy dancers, and even now it sets me back when I hear that the Pennsy has a shimmyshaker, whatever that it.*

A The shimmyshaker or Big Bertha, as nicknamed by Pennsy railroaders, consists of a steam locomotive, two water tenders (giving the locomotive sixteen, instead of the usual eight hours of continuous operation), two supply cars, the hoist, a discharge car and nine dirt cars. The hoist is operated by a 400 horsepower Diesel-electric engine which supplies the power for all the operations of the unit. The shimmyshaker operates continuous digger buckets attached to belts on each side of the machine. As the belt revolves, the buckets dig ten inches into the gravel on either side of the tracks, scooping up the stone, which is then deposited on endless belts. The belts take the stone to a conveyor; which drops it on a vibrating screen. The dirt and extraneous matter which sifts through is delivered to conveyors that carry it to the nine dirt hopper cars. The clean stone is taken to a bin and then dumped back on the roadbed. The ballast cleaner inches over the track at one-third mile an hour. It fills nine to ten hopper cars with dirt daily. The machine operates 240 days a year, and then lays up for repairs at Renovo, Pa. Besides the operating unit of sixteen cars, there is a camp train of eight cars which houses the crew. Here all the members of the crew not on duty eat, sleep and relax between shifts.

Q *What United States railroad carries the heaviest tonnage over each mile of its line in a day?*

A This distinction goes to U.S. Steel's 223.8-mile-long Bessemer & Lake Erie Railroad. For the last fourteen years this line has led in the average tonnage hauled per car mile, net ton-miles per average car-mile having amounted to 77.5 in one year. Large capacity B&LE rolling stock helps the road in its unusually high tonnage record. Of the fleet of approximately 10,000 hopper cars, 5927 are of 90-ton capacity. Of course, the steel is there, to begin with. B&LE depends on *Consolidation* and *Texas* type steam engines and EMD Diesels to pull the freight.

Q *Every year around floodtime in the Midwest we hear a lot about elevation or lack of it. On the Illinois Central, which I use, just what is the highest point?*

A Near Gaza, Iowa, on the line to Sioux Falls, S. D. the railroad reaches a high point of 1520 feet above sea level. Extending westward from Chicago, the line traverses prairie country for 113 miles to Freeport, where the country becomes gently rolling. A large number of streams are crossed entering and leaving the Mississippi River Valley. The line drops from an elevation of 944 feet to 623 feet in a distance of 80 miles, east of Galena, Ill. In leaving the valley westerly it goes up 428 feet in 12 miles east of Peosta, Iowa. From there westward the country rises gently in rolling hills to Gaza.

Q *How much has the railroad commuting picture changed in the New York metropolitan area? In the last twenty years the increased population should have helped the railroads, I would say.*

A While there were 4,712,497 living in the metropolitan area outside the city limits in 1930, and 6,029,651 in 1950, there were 215,600 railroad commuters in 1930 and only 211,700 in 1950. Part of what the railroads lost, the buses and private automobiles picked up. Twenty years ago 38,050 persons came to town daily on rubber tires; in 1950 the daily total was 118,400. Meanwhile, the average length of a commuter's journey remained about the same.

But the picture is not too simple. The decline in daily rail commuting took place in New Jersey; Long Island daily rail commuting grew by 50 percent; daily rail commuting to Westchester and Fairfield County more than held its own. The catch is that the spread of the five-day week greatly reduced the total number of cummuting trips a year, even when the total number of habitual and indurated commuters held steady or grew. Another catch is that the commuter is not quite so important as he was in suburban communities. The region is being decentralized somewhat. There are more jobs near home. In 1930 there were 264 commuters for each 1000 suburban families. In 1950 there were only 209. The metropolitan area is changing; some of the changes were planned and others were not. Plans to improve the region's highways were not only made but carried out, but plans to improve the railroads were not made or carried out to any comparable extent. The good highways made it possible to bring more and more private automobiles into the heart of the city, and this in turn has helped contribute to traffic congestion which nullifies much of the usefulness of roads and cars.

The Regional Plan Association suggests that the Port Authority make an objective

U.S. Steel's Bessemer & Lake Erie depends on road engines and Diesels to help road carry heaviest tonnage in America day in, day out, but six-wheel switcher, at Greenville, Pa., is important cog, too

Roy L. Baker

G. W. O'Connor

Connecticut commuters to New York City have increased proportionately, according to Regional Plan Association's 20-year survey. New Haven train No. 9 sweeps through Mount Vernon, N.Y. to unload human cargo in Grand Central

study "to appraise the present policy of allowing the railroad systems to remain static, while concentrating investment on vehicular traffic arteries leading into Manhattan." The association made a similar recommendation in 1929. Perhaps the situation is serious enough now to win some belated attention.

Q *How many modern steam locomotives were retired recently by the Chicago & North Western.*

A The C&NW has retired one Class H type 4-8-4, No. 3002, and two Berkshires, Nos. 2802 and 2803.

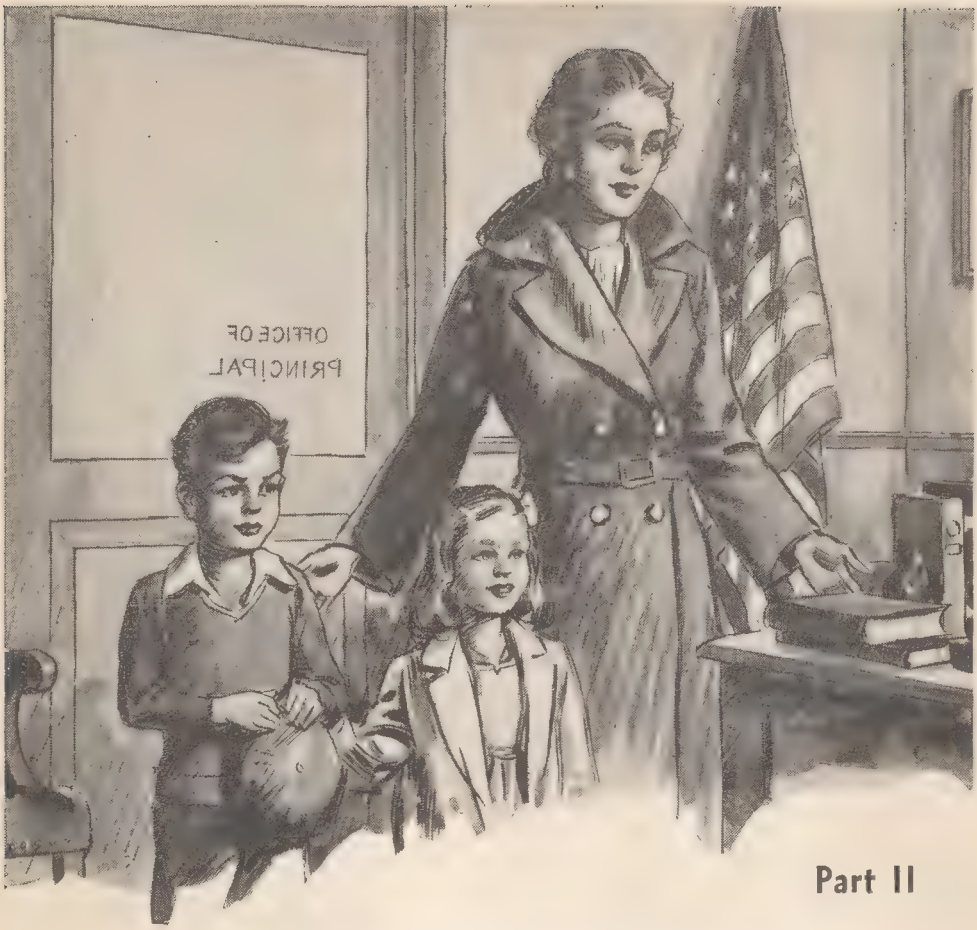
Q *Do you have a short history of the Pittsburgh & Susquehanna? I've looked everywhere, without success.*

A The Pittsburgh & Susquehanna was incorporated in Pennsylvania on August 15, 1913, a reorganization of a company of the same name, sold at a receiver's sale, June 2, 1913. On January 17, 1919 G. W. Ziegler was appointed receiver of the unlucky road, which was again sold at receiver's sale on April 30, 1920. Once more the company emerged with the same name, being finally incorporated on June 17, 1920. The road was abandoned in October, 1936.

In 1924 the Pittsburgh & Susquehanna owned four locomotives; four passenger cars; one combination car; two flats; two cabooses; one other piece of freight rolling stock, and 22 service cars. The line extended from Wigton to Fernwood, in Clearfield County, Pa., a distance of 15.50 miles, with a 2.39-mile branch, making a total of 17.89 miles operated. There were 3.50 miles of sidings. The line was standard gage, laid with 60- and 70-pound rail. An extension of 6 miles, projected to connect with the Pennsylvania Railroad at Eutahville, Pa., was never built.

Q *What is the scope of Pullman's laundry operations?*

A Pullman laundries wash and iron every month some 1,687,000 sheets, 1,656,000 pillow slips, 2,280,000 towels and 522,000 other pieces. That's quite a bit of soiled linen, something which George M. Pullman never thought of when he turned out his first sleeper.



Part II

SAGA OF THE SPURS

KATHERINE LORENZINO

IT TAKES a heap of living to make a caboose a home and Emil, the children and I realized this fact when we moved into our old dilapidated No. 1039. We missed the comfortable, easy way of life we had known in our former rolling home. Our second crummy was transferred to us from another gang. This wobbly shack had side doors which sagged, two broken windows, a leaky roof, a few flat wheels, plenty of dirt and a variety of bugs. It was evident the previous tenants' dog had used the closet for a kennel.

We removed all the grille work, the bunks, a few closets, fumigated the whole thing with fusees and painted it a pale green. From then on we lived happily if not comfortably and in time grew to like the old wreck. A few months later we reached Barstow, and Mr. Hoskins, the roadmaster, ordered our antique caboose on the rip track. We lived in it while it was jacked up high at one end. The carwhackers removed the flat wheels but unfortunately a certain new part was not in local stock and it was necessary to send

**The principal was very helpful—
"What kind of a woman are you to
raise your children in a railroad caboose?"**

to San Bernardino Storehouse for it. For a couple of days we climbed up and slid down the floor of our crummy. I can't tell you how uncomfortable our beds were. It was a great relief to regain our equilibrium when the jacks were removed.

Workmen swarmed over my shack, patching the roof, nailing boards, putting in window panes and hammering on the trucks beneath the floor. I bought a nice pair of caboose doorknobs from one of the workmen for a cup of coffee and a piece of pie; a carpenter built some shelves for a bowl of soup; a painter sold me a gallon of paint for some sandwiches and milk—in fact I bought all kinds of caboose improvements with my home cooking. When the children and I had lived through this pandemonium we were glad to move to a quiet spur near the cattle corral.

Peach Springs sounds tranquil but it wasn't for our gang on October 30, 1936. That evening I waited and listened for the familiar sound of Emil's motorcar. He was very late coming in from work. I surmised the old speeder was giving trouble somewhere along the line. I bathed the children, gave them their supper and put them to bed. Diana, the stove, was balky and I chopped armfuls of wood to feed her and keep the drafty crummy warm. I climbed into the cupola every five minutes and watched for engine smoke. At last an extra stock train went by and I knew Emil would be in soon.

Another hour passed and it was dark and cold outside. At last I saw the men limp slowly around the curve some distance away. The looked like a bunch of broken down cowboys. I counted the full crew of eleven men but only three lunch boxes, so I was prepared for the worst. The men crawled solemnly by my caboose to their outfit cars and I missed their jovial banter.

Emil's face was dirty and worried as he kissed me. He had no lunch box to put on the shelf. I hurried with his clean socks and shoes, handed him a towel and put the comb in his hand, for he was in a daze. Neither of us spoke a word all the while. He hurried to his desk in the cupola, scribbled a note and ran to the telegraph office. While he was gone I read the copy: "10-30-36 to C. I. Jones, Roadmaster at Kingman, Ariz. Motor car with welding equipment hit by extra drag 3854 at mile post 464½ while coming in from work. Everything wrecked. No one injured. E. G. Lorenzino at Peach Springs, Ariz."

I BUSIED myself with supper, and ages later Emil returned from the station. After much coaxing he ate and told me the details of the wreck. The gang was rolling home heavily loaded with the heat treater, grinding machine and a few gas cylinders, all on the flatcar, when Tex Aul saw the smoke. They stopped pronto and threw the oxygen and acetylene gas cylinders into the brush. Five men became panicky and took off into the horizon. The flagman, Hightower, sprinted around the curve toward the rushing train but too late to do much good. The remaining five men, Tex Aul, J. C. Brown, Morie Bartlett, Arkie Moody and my Emil worked feverishly to unload the heavy equipment and tip the motorcar. The extra stock train west out of Seligman hit the machine and scattered $10,000 worth of everything all over the right-of-way and beyond.

When the drag stopped the engine was festooned with coats, lunch boxes, the water barrel and a few pushcar wheels. The long gas hose was draped artistically around the smoke stack and down the sides, while the manifold perched jauntily on the engine's headlight. Water and oil from the motorcar hissed and frothed down the front of the locomotive. Engine 3854 looked like a well-decorated Christmas tree after a rough party. The quiet desert air resounded with the noise of bellowing cattle, squeaking hogs and bleating sheep as they supplied the jazz for the surprise party. Hunks of the motorcar, pushcar and assorted junk blocked both main lines and much of it is strewn over the Arizona landscape today.

Horrible days of explanations, interrogations, demonstrations, investigations and volumes of correspondence followed. Emil was assessed thirty brownies because the accident was his fault. He had neglected to phone the dispatcher before proceeding home. During the forced layoff the boys changed their names and signed on a surfacing gang spotted near us. On November 13, the old gang reported for work, very glad to have a new motorcar, as they claimed the old heap was a jinx. I profited by the layoff, for we spent a few days visiting Grand Canyon.

Our furthest move east was Rio Puerco, near Albuquerque, New Mexico. We were spotted out at many spurs on the Laguna, Acoma and Navajo Indian Reservation country. There was a sameness to these places: dry winds, sagebrush, sand storms and no stores. They all had their quota of rattlesnakes, jackrabbits, howling coyotes and sassy gophers.

We arrived in Gallup, New Mexico, the Indian capital and shopping center on the desert, during a freezing spell. There were days the men couldn't start the motorcar to go to work. No matter what the weather, we enjoy working in Gallup for it is Emil's home town. I came to Gallup from Boston and worked there as McKinley County Public Health Nurse 1930 to 1934. We both have many dear friends in this town and we love the place.

All good times come to an end and the

welders moved to Arizona again, with more sheep, more desert, more Navajo Indians. However, my encounters with Indians were few: a shepherdess who insisted on watering her small flock at our water can. We put a lock on the valve and discouraged her. And a young buck rode up to my caboose one day and tried to sell me a long-bladed knife. He hung around too long and I scared him away with the housewife's faithful weapon, the broom. I have never heard of an Indian molesting anyone on railroad gangs; many are employed by the railroad and live in bunkcars and work whenever they please.

MY ENTHUSIASM improved as we moved west across Arizona. The Petrified Forest and Painted Desert were our Sunday picnic grounds. When we arrived at Flagstaff I recaptured the unexplainable feeling of the Golden West. While the local freight put us on the spur east of the town, Emil went to the station to phone Roadmaster Conway and collect the overdue mail. The children and I sat in the flivver near the spur waiting for the crew to set the brakes, when to my horror I saw an old abandoned reservoir near my caboose steps. I jumped out of the auto and went to the conductor and asked him meekly to move the outfit cars further east away from the pit.

He pretended not to hear me and signaled the hogger to move the engine onto the main line. I shook my head "no" to the engineer. He grinned and didn't budge the engine, though the con kept highballing. When I argued with the con he glared at me and said, "I don't take orders from women on extra gangs." I was dismayed and scared Emil would lose his job if the con turned me in but I brazened it out while the train crew enjoyed the argument.

Finally I yelled, "I'll drive to the station and meet you there, then we will both ask the agent to settle this debate." Those words were magic for he suddenly changed his signals and the outfit cars moved slowly east. The con was a good sport for he didn't write me up for delaying his train.

I think the local crew and I evened the score when we moved to the next town, called Williams. They handled the welding gang's outfit like the super's special as they backed us on the spur near the water tower. The children and I went into our caboose when it was stopped in front of the station and I marvelled how easy our shack rode as they switched us off the main line onto the back spur. The caboose stopped moving, I heard the hand brakes twirled, and the hiss of air-brakes convinced me we were spotted and all was safe. As I put my geraniums on the window sill the caboose shuddered, bounced and leaped while everything inside slam-banged around. The youngsters were safe in their cribs but they yelled to high heaven as we were dragged six car lengths. The plants and I hit the floor together. The fracas stopped suddenly and the con knocked on my door and asked if we were all right. I opened the door and let my broken flower pot sail out over his head, showering him with dirt. He knew then I wasn't hurt.

While he shook the dirt off his cap and shoulders he explained the new brakeman had neglected to uncouple the engine before he highballed. The hogger caught the signal and started rolling with out looking back, not realizing he was dragging the whole outfit along. They put us back gently on the spur. Emil was in the roadmaster's office during this commotion. The next day the con met Emil and asked if I was still angry about my broken flowers. He gave Emil a nice little geranium to give me as a peace offering.

Track welders have no set schedule of work and the gang moved far and often over the whole division. So down to sunny Capistrano we moved next. The whole world knows about the swallows of Mission Capistrano, including me, for we were on a spur very near the old mission. The local spotted our outfits after dark. We were at the beach at the time and when we did arrive at the spur we entered the crummy on the track side and

went to bed. During the night I heard new creaking sounds added to the familiar noises in our old shack but I was too tired to get up and investigate. We had a pleasant surprise when we opened the door on the field side the next morning. A large avocado tree grew in front of the door—all we had to do was pluck and eat the luscious, ripe fruit. White pigeons and swallows flew around our caboose all day.

THINKING of trees reminds me of orange groves we were spotted in. Azusa is near Los Angeles and we were there in January of a "slightly cool" winter. The smudge pots burned every night and it was an eerie sight to see hundreds of dancing flames all around us. Each morning a heavy pall of soot covered everything inside my crummy. I decided I should have some compensation for the extra work the soot caused me. I walked up to the field manager one morning and told him I needed some orange juice to wash down the soot from his smudge pots. There is a heavy penalty for stealing fruit, so after some argument he told me to help myself and I made him extend the privilege to the whole gang. Oranges sold for ten cents a pound at the local stores. I didn't mind the soot after that.

Layton is in a thriving farm community in the Joaquin Valley in California. It is about five miles from Hanford. We were in this town only once but I will always remember what happened there. One morning Emil started off to work as usual, but soon rushed back to our crummy all excited, for the dispatcher had ordered him to load up the outfits and be ready for the light engine which was on it's way to pick us up. The King's River was rising dangerously and we were spotted near its bank and if we didn't get out soon the gang would be marooned, for the bridge had weakened, according to the section foreman's report.

The gang rushed around heaping everything on the flatcar. At last the engine crept across the bridge and coupled onto the outfit cars. Emil put the children in the auto while I hurriedly packed a bag with clothes, food, blankets and toys. He kept yelling to me to hurry up, and I climbed out of the crummy as the brakeman loosened the brakes and the cars began to roll. As I drove away I could hear Emil calling, "Drive fast Katie and stay in the middle of the road." The men rode the motorcar and pushcar with the equipment right behind the outfits and engine, across the bridge to safety.

I joined a line of cars fleeing town; I had no idea where they were going but I tagged along. There were trucks loaded with cattle, horses, furniture and all were jammed with people. It was a long slow caravan, so slow I asked the driver of the truck behind me if he knew a better way to Hanford. He said to follow him but it would be fifty miles out of the way by the route he planned to take. I had plenty of gasoline and we left the crawling line of cars. That young driver must have been a local boy for he certainly knew his geography. Five hours later I drove down the crowded street of Hanford and found my crummy safe and sound, spurred near the station. I was sorry for the people who left their homes behind them. The river flooded the town of Layton that afternoon and volunteers rescued people from the roofs of their houses.

When the war started we went back to Barstow. The yards were a madhouse and the only spur we could get on was near the main line. One warm winter afternoon, the children were taking their naps and it seemed quiet outside. I was sitting at my sewing-machine near the window. The rear end of a troop train stopped next to my caboose. The main line was about thirty feet away so I could easily see some of the soldiers reading. Others were sleeping, while the more curious were hanging half out the window to get a good view of the town. Now, my sewing machine is of the vintage of 1888 and has grown noisy and wheezy with the years. But it sews easily and I started to stitch a long seam at a fast speed. Suddenly a series of police whistles sounded up and down the troop train. All the windows slammed shut and a soldier with a tommy gun appeared on

In a voice with a Southern drawl the sergeant said, "Lady, will you please put some oil in your sewing machine!"

the train platform. He looked around the train, then stepped to the ground and scanned the sky. I watched this pantomime through the starched curtains and thought it was some kind of a drill and kept stitching merrily on. Then a car window opened up a foot and a soldier inside pointed at me and called to the lad on the ground, "Look Sarge." The sergeant swung around with his gun aimed at me ready for action. I sat stiff with fright. I couldn't get up, I couldn't call out. I stared at the soldier's set jaw and gleaming eyes as he took slow measured steps toward my window, with his gun pointed right at me all the time. He came close enough to peer through the curtain. When he realized the situation, he relaxed and lowered his gun and a sheepish look came over his face. Needless to say I also relaxed. In a loud voice with a deep Southern drawl he said, "Lady, will you please put some oil in your sewing machine?" Then he sprinted lightly to the train and up the steps. I could hear all the soldiers laughing as they opened their windows and the train pulled out. I took Sarge's advice and Emil picked the sewing machine apart, oiled it well but it still goes rat-tat-tat like a machine-gun.

THOSE DAYS of national crisis in 1941 affected the welding gang, for lack of steel required more welding of

frogs, switch points and joints. We moved oftener and our caboose graduated from the local freight train and the hotshots speeded our outfit cars to different locations. Of course the children and I didn't ride these trains; we drove in the auto from place to place, wherever we were sent. It was awfully tedious. Hotels and motels were filled to capacity everywhere. When the gang's outfit was put on a night train we had a long night drive to get to our destination in time for Emil to go to work the next morning. We always bedded the children comfortably in the back of the auto and took turns driving and sleeping.

We arrived in Los Angeles Yards about eleven o'clock one night and the yardmaster told us our cars were due in about 1 a.m. We drove to the Willow Street spur and waited, but no outfits arrived. Emil fell asleep and his even snoring made me drowsy for I was completely exhausted after a long hard drive from Needles.

In desperation, I opened up the army cot we always carried in the auto and set it right up on the sidewalk on Willow Street, which is located in the wholesale district. Only trucks and switch engines went by at that time of the morning, so I slept sweet dreams until a bright light flashed in my face. I peeked out of one eye and saw the city police car parked nearby. The officers looked at the children sleeping comfortably in the back of the auto, then at me. I pretended to be asleep and hoped they would go away. They shook Emil and asked in a low voice if I was his wife. Poor Emil explained we were waiting for our caboose to come in on this spur and that we would be in our own beds soon. They apologized for waking him and drove quietly away. I went back to dreamland on the sidewalk of L. A. until the yard donkey's bell woke me as they spotted our outfit cars, at 5 a.m.

We stayed in the Los Angeles Yards for a few months and in the fall went north to Oakland and Deadman's Spur near the station. The section foreman told us nobody liked this spur but there was no other nearer the welding work. As a joke he said the city limits divided our Caboose 1039, the right half being in Oakland and the other in Emeryville.

The first evening on Deadman's Spur, Emil and I reread the many correspondence school booklets he had accumulated. Joe was five years old and the selection of a school had to be decided that night. The letters were enticing, especially the quotes from travelling statesmen and diplomats endorsing the educational results allegedly obtained by their children. Our hopes were high until we read "two hundred dollars for tuition, in advance." We couldn't agree on a school so in a rage I grabbed all the nice literature, walked to Diana, the stove, dropped them in and watched them burn. Emil looked dumfounded. In a quiet voice I said, "Joe is going to a public school tomorrow where he can play and fight with children his own age." I sat on the couch beside him and continued, "Stop worrying yourself thin. The children and I will not leave you and this old crummy because Joe has to go to school." Emil breathed a sigh of relief, raided the ice box, went to bed and snored.

The next morning the children and I went school hunting. We joyfully entered the principal's office at the nearest school. She politely listened as I explained how and where we lived; then she said, "I am really sorry we are over-enrolled. There is another school west of here." At this school the excuse was, "No room here either, and you are out of your district." We visited a third school and the curt answer was, "Sorry there are no empty desks here. Your boy is still young, why don't you wait a little longer?" We passed a settlement school but it's appearance and enviroment wasn't very pleasant. At the fifth school I got this advice, "Well, if your calaboose, pardon me, your caboose is half in Emeryville why don't you try a school over there?"

Over to Emeryville we drove and Joe didn't romp so gleefully up the steps of the next school. The principal was astounded at my story and her comforting remark was, "What kind of a

mother are you to raise your nice children in a railroad caboose?" I replied sarcastically, "I am raising my children in a caboose to keep the family together, for I didn't marry just to have 'Mrs.' on my tombstone." At the seventh school the principal was out for lunch and the clerk said they were over-enrolled on account of an influx of war workers' families.

IT WAS noon and in our quest for a school we had wandered into the suburbs. We ate our lunch in a small park. The children played on the swings as I sat on a bench and gazed longingly towards a cozy yard where an old lady hung her wash on the line. I envied the neat houses, trim lawns and flower gardens on the quiet street. The old lady finished her chore and went inside as I scanned her wash of men's shirts and women's dainties but no children's clothes. I took another look at her front porch and called cheerfully to the children, "Come Rose. Hurry Joe, you are going to school this afternoon!"

The old flivver galloped around corners and jolted to a halt in front of a modern primary school. Rose was asleep on the back seat so Joe and I stepped lightly up the school steps. At the door Joe whispered hopefully, "Do you think the teacher will let me go to school here, Ma, huh, do you Ma?" I opened the heavy door and said, "Keep up your courage, I know you will go to school here and I hope you will like it." I walked bravely to the registrar's desk, filled out the admittance forms and waved goodby to my happy Joe as he walked down the hall and vanished into his first classroom.

After supper we drove about eight miles to the quiet community where Joe's school was located and he beamed with pride as he pointed to his classroom window. We found my little park and Emil and I sat on a bench while the children did handsprings on the grass. I pointed to the corner house where my little lady and her husband sat in a hammock and I said to Emil, "That nice cozy house over there is supposed to be our home for I gave that address to the school when I registered Joe today." We laughed and he replied, "You didn't let me down Katie, even if you had to fib to the teacher." I've used fictitious addresses many times during the past ten years and I expect to do so as long as the children attend school while living on the railroad tracks.

While we were in this part of the state we were sent over to Richmond and the switch engine put us on a quiet spur near a high board fence. When the work here was finished it was impossible to move our outfit south because of floods all through the valley. It would be a month before any nonprofit freight could be moved over the Santa Fe as all its business was moved over the Southern Pacific tracks. Mr. Christie, the superintendent, gave us formal notice to vacate the outfits and disband the gang. If we wanted to, we could have driven to San Bernardino and joined some gang there, but that would have meant leaving our caboose and moving into another outfit. Emil fretted about the eviction notice, but I didn't—I tore it up because I really liked old Caboose 1039 after all the adventures we had had in it.

One morning I arose early, built a fire in Diana, put the kettle on for coffee and went back to bed. Emil awoke a while later and whispered, "I smell something burning." I answered, "I built the fire. I'll call you when coffee is ready, go to sleep." He didn't say anything but dressed and went outside and looked up at the chimney. He rushed in and doused the fire in Diana, then ran to the station for help. My old Crummy 1039 was on fire. I dressed hurriedly, closed all the windows, stood on a chair near the stove and splashed dippers of water up at the chimney jacket. There was no smoke inside the caboose and the children slept peacefully. Loose bits of charred wood dropped around me and I had a panicky feeling. We didn't have inside plumbing and my meager pail of water was about empty when the switch engine came along with a gang of men to fight the fire. Someone opened the door and the smouldering wood burst into flames along the ceiling. I awoke

the children and hustled them to the auto and drove it a safe distance away.

We sat and watched helpful strangers throw my pitiful belongings out the door. Someone carried out my sewing-machine and gateleg table and put them near the auto. These were my remnants of old decency. Luckily the city fire department was not called. A strong stream of water deluged our sorry crummy and though the sounds of picks and axes sounded like thunder, they were faint compared to my thumping heartbeat. The children were frightened but behaved wonderfully. I was too stunned to cry.

The section foreman, Mr. Craven, came over and told me there was very little damage. Soon the hose was rolled up, and the men climbed on the engine and were gone before I could thank them for saving my caboose. When all was quiet I walked alone into the remains of my happy home. As I stood pondering about the future, a Safety First man of the Santa Fe inspected the ruins and said it was still habitable. I gleefully moved my belongings back in and the warm sun soon dried the walls. Living went along as usual except for a large hole in the ceiling right over the stove. So many officials inspected the damage we didn't cover the hole up. It was nothing out of the ordinary to look up from my cooking into the face of some men peering down at me. I spent hours writing reports of the fire to all concerned. Emil wasn't assessed brownies (demerits) for he was not on the payroll at the time of Diana's fire, my fire.

One happy day a week later, a train-gram ordered the gang back to work and we moved from Richmond to San Bernardino. While there, Mr. Patton the roadmaster issued us an outfit car. I hated to leave my caboose but was pleased to move into a renovated refrigerator car. I was thrilled with my new home and realized my social status on the railroad had improved for I lived in something that resembled a standard outfit car. At last I was keeping up with the Joneses.

Life in cabooses, a reefer and several glorified boxcars has been adventurous, profitable and sometimes hilarious but most of all progressive. Emil, Joe, Rose and I now live in a comfortable outfit we call our "Little Gray Home On The Rails." Electric lights, running water, a new stove and indoor plumbing make life easier.

The children attend high school. They have never tired of railroad life, for it is the only life they have ever known. Dopey our goldfish, lived with us for three years until one day he swam upside down. Emil's sanctum is an office in the tool car; sometimes I think it is a club house. Our water car is an old engine tender (1644) and our racing pigeons live on it in a loft Emil built in the compartment originally used for the engine coal. We have had good racing homers for four years and we call our champ "Caboose". We have been spotted here, on Bloomer's Spur in the Los Angeles freight yards, for twenty one months. So we don't see the local any more. I often see my old Caboose 1436 as it goes by on the Harbor Run to Long Beach. What happened to 1039? She wasn't fit for service after the fire and was finally scrapped.

Moving days are now gala occasions, for we renew old acquaintances wherever we go. That is one of the joys of living in a boxcar on the Santa Fe Railroad tracks.

Coming Next Month:

COMMUTING ON THE CENTRAL

NYC's share in the world's biggest transportation problem

By MELVIN KRAMPF

"We picked it up at the last stop—you said take everything!"

BOSINO
RESTAURANT

Electric Lines

LAKE SHORE ELECTRIC

JAMES GREENE and STEVE MAGUIRE

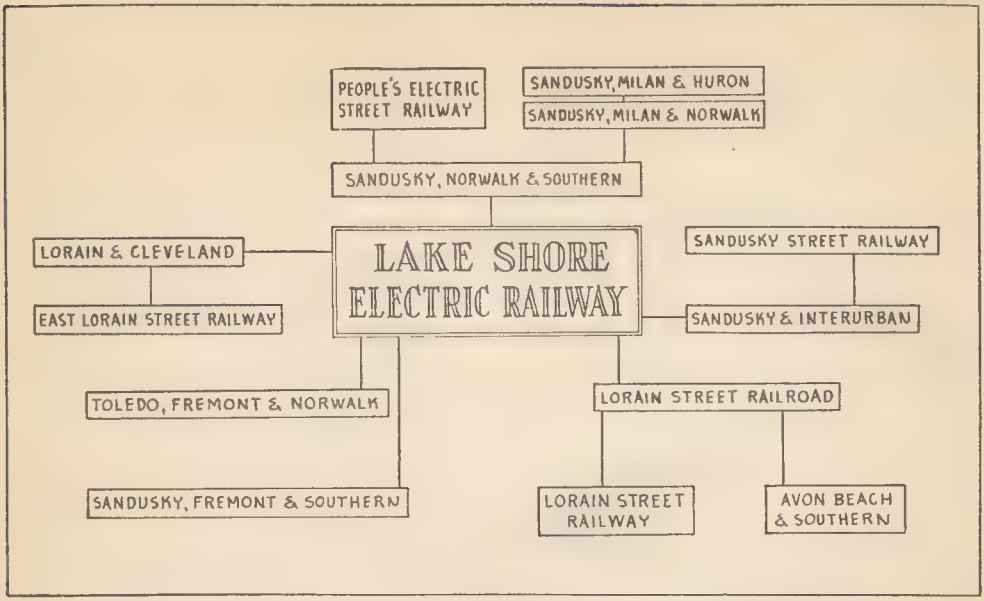
THERE's no question but that the Lake Shore Electric Railway, wheeling for many years along the south shore of Lake Erie between Cleveland and Toledo, was, in every sense of the word, a real interurban. It vanished in the onrush of the automobile nearly fifteen years ago, although it was one of the favorite interurban lines lines of the many that combed the State of Ohio in the interurban heyday.

Those heavy, wooden Niles and Jewett inter-

Continued on page 78

Juicefan's paradise in 1934 was Lake Shore Electric excursion at Sandusky, O. Passengers who emerged unscathed transferred to ferry for Cedar Point, popular amusement resort offshore

John H. Heller, Lima, O.



LSE started in 1901 with SN&S, L&C, TF&N; later took over SF&S and LS

urban cars still hold a peculiar fascination for so many juicefans. From the start right to the end, the company operated an assorted group of ornate and beautiful masterpieces of car-building art in high-speed service over its 180 miles of track. Some other interurbans supplanted heavy cars with lightweights in the 1920's, but the LSE chose to run its big orange and yellow equipment to the end.

Northern Ohio, where the Lake Shore Electric operated, was the location of many other interurban roads, too. Four other interurbans entered Cleveland and terminated at the Public Square, along with LSE cars. These were the Cleveland, Painesville & Eastern, the Eastern Ohio

Car 201, *right*, built by St. Louis Car Co. in 1927, was among most modern Lorain Street Railroad equipment in Lorain-Elyria service. After LSE abandonment 200-series were sold to Birmingham Electric Company, which used them in World War II. Older Peter Witt-style Car 84, *below*, saw Lorain-Elyria service, too

Photos from Steve Maguire unless otherwise noted

Traction, the Northern Ohio Traction & Light and the Cleveland, Southwestern & Columbus. This last road, paralleling LSE trackage for a considerable distance, competed with the LSE between Cleveland, Elyria and Norwalk. At the Toledo terminus, even more interurbans were found. Toledo streets rumbled to the sound of cars of the Toledo, Port Clinton & Lakeside, the Toledo & Western, the Toledo & Indiana, the Maumee Valley Railway & Light, the Toledo, Fostoria & Findlay, the Toledo, Bowling Green & Southern and the Detroit, Monroe & Toledo.

Like so many other interurban lines, the LSE came into existence as a consolidation of many smaller routes. The Everett-Moore syndicate was responsible for the creation of the Lake Shore Electric as a long-distance traction line in 1901 through the purchases of controlling interest in an assorted group of railway lines in the heavily-populated section of northern Ohio.

At least five separate operating lines were pieced together by the Everett-Moore group to form the original Lake Shore Electric Railway which took over their operations in August and September, 1901. To clarify a somewhat involved history, we will outline their development as separate companies up to the 1901 consolidation.

One of the earliest railway lines was located at Sandusky, where a local streetcar system began running in 1891. It was the People's Electric Street Railway. In 1892 a separate corporation, the Sandusky, Milan & Huron was formed to construct lines out of Sandusky to Milan and to Huron. In 1893 this company went into receivership and with the aid of a group of citizens of Norwalk it was taken over and emerged as the Sandusky, Milan & Norwalk Electric Railway with plans for building south from Sandusky to Norwalk. The financial assistance of the Norwalk townspeople enabled construction to progress to Milan, with service starting on July 18, 1893, and later in the year the entire run to Norwalk was in operation. There was a delay from the objection of the Wheeling & Lake Erie to the use of a bridge entering Norwalk, but on December 1, 1893 service started.

It is claimed by many that this line was the first interurban railway of its size in the United States. Mail, freight and pas-

Rudy Moc Studio

sengers were carried and through tickets on steam roads were honored in interurban style. Two cars gave service. One was No. 9, a combination passenger, mail, American Express and baggage car. The other, No. 11, was a Pullman-built doubledecker for passenger service only. The cars were painted white with gold trim. The powerhouse was located at Milan, birthplace of Thomas A. Edison.

The SM&N went ito receivership on August 21, 1893, but this did not affect construction or operation. It did, however, cause the SM&N to be sold to a new corporation, the Sandusky, Norwalk & Southern, on November 23, 1900. The new road aimed to build south to Mansfield, but never did make it, the connection being built by two other interurban companies.

All Sandusky lines went into the SN&S when the People's Electric came under SN&S control on December 29, 1900, and it was less than one year later when the SN&S was sold to the newly-formed Lake Shore Electric, on September 21, 1901. At that time trackage of the SN&S totalled 25 miles.

As early as 1890 a company had been organized to build a streetcar line in Lorain. This was the East Lorain Street Railway. It came under control of the Lorain & Cleveland Electric Railway in 1897. The L&C line had been formed in 1895 to build a road through Rocky River and Lakewood into Cleveland. The Lorain-Cleveland route, opening in 1897, had ten Brill suburban passenger cars with open back platforms and two Brill combination cars. Service was half-hourly in summer and hourly in winter. A carbarn and powerhouse were located at Beach Park, a community about one-third the distance between Lorain and Cleveland.

On July 27, 1898 the Everett-Moore syndicate took control of the L&C line and planned to pioneer a through interurban line from Cleveland to Toledo. This came nearer realization on Septem-

ber 23, 1901 when the L&C directors voted to make the line part of the LSE.

WESTERN portion of the Lake Shore Electric had its beginning in the Toledo, Fremont & Norwalk Railway, organized in 1899. Work began on September 1, 1899 and by September 5, 1900, service started between Fremont and Toledo. There was a delay in entering Norwalk as tracks of the Sandusky, Milan & Norwalk had to be used to enter the city. Before the line was completed all the way, the Everett-Moore group had taken control and on August 7, 1901 the TF&N became another part of the Lake Shore Electric. Rolling stock of the TF&N consisted of 22 passenger cars built by Barney & Smith. These were equipped with only two 75 hp. motors, but the LSE later re-equipped them with four motors. There were also three freight cars and a snowplow.

Another portion of trackage that went into the LSE had its start in the Sandusky & Interurban Electric Railway, incorporated on June 1, 1900 to build an interurban line from Sandusky east to Lorain via Vermilion and Huron. This company had purchased the franchise of the Sandusky Street Railway, orginally chartered in 1881. The S&I's predecessor had operated nine miles of city lines in Sandusky, using 12 motor cars and two trailers, but when it went into receivership in 1897 it was taken over by the S&I.

Construction of the S&I line toward Huron took place during 1900, and a route was planned from Ceylon, which was along the Sandusky-Lorain line through Berlin Heights to Norwalk, but it ran into a difficulty rather common in the days when so many interurban lines were being projected. This occurred at Lorain when the S&I received its franchise. The Lorain City Council had granted the line a franchise to build a double track line on

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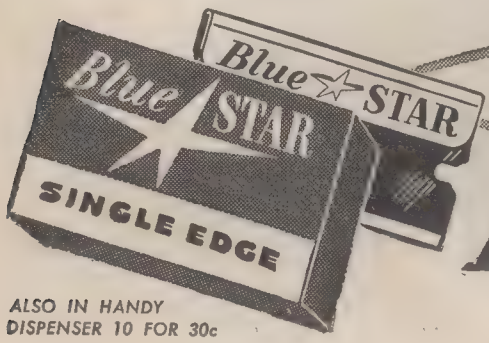

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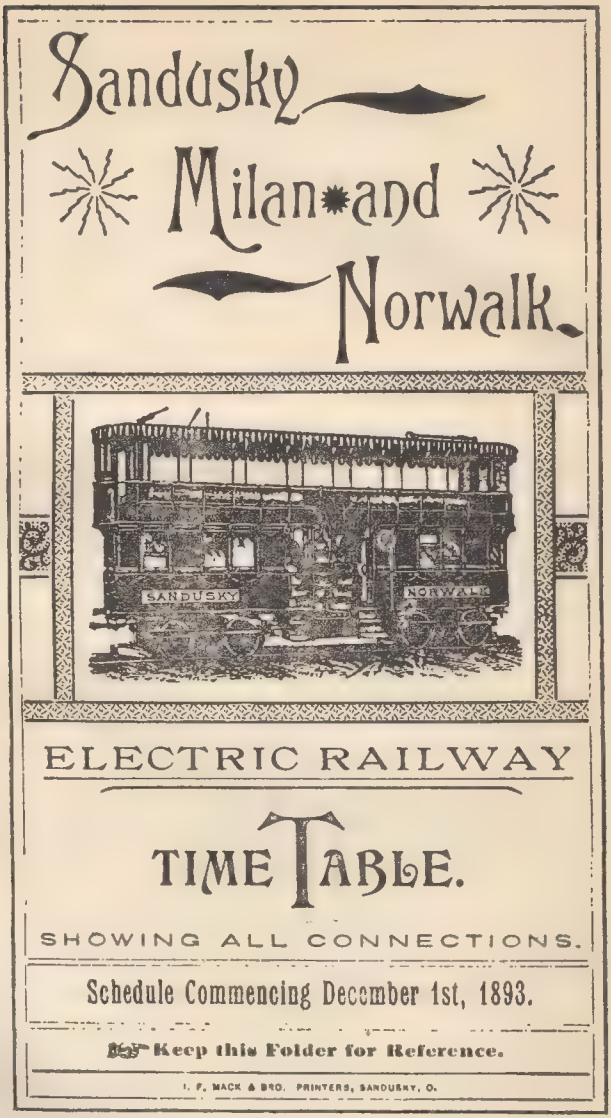
West Erie Avenue, but it also had granted the Cleveland, Elyria & Western (later part of the Cleveland, Southwestern & Columbus) a franchise to build a single track on the same street. So, the S&I laid down its tracks and then the CE&W built an additional single track along the side of West Erie Avenue.

At this point the confused Lorain City Council tried to rectify the situation by ordering the two companies to place their tracks six inches apart; but, of course, this wouldn't work as the overhang of the cars was considerably more than six inches. Eventually the lines agreed that the S&I should own the rails, giving the CE&W trackage rights over them.

Another dispute arose between the two roads over a franchise on the Old State Road on the east side of Norwalk. The CE&W wanted to extend its line from Oberlin to Norwalk while the S&I was building a line from Ceylon Junction to Norwalk. Rights had been granted to both roads. Finally, the same type of settlement was made, giving the S&I the ownership of the single track into Norwalk, and the CE&W the trackage rights. In all such cases, of course, each company strung its own overhead wire since it had its own power plant.



In 1901 the S&I became part of the Lake Shore Electric, but at the time track was not completed from Huron to Lorain and on the branch line from Ceylon to Norwalk. Thus, when it commenced operations, the LSE was divided into two operating divisions. One was the line from Cleveland to Lorain on the Cleveland & Lorain and the local Lorain routes of the East Lorain Street Railway. The other division covered the lines of the S&I from Sandusky east to Huron; the Sandusky-Norwalk route of the SN&S; the Norwalk-Toledo line of the Toledo, Fostoria & Findlay, and the city lines at Sandusky which were originally part of the People's Electric and the Sandusky Street.

There were two other wholly-owned subsidiaries that formed part of the Lake Shore line. At Lorain the line to Elyria was operated by the Lorain Street Railway, while a short line ran from Beach Park (location of the LSE shops) to

South Lorain, known as the Avon Beach & Southern Railway. These routes were consolidated in 1906 into the Lorain Street Railroad, wholly-owned by the LSE. The Lorain city routes, chartered in 1894, had begun operating late that year on a 12-mile run to Elyria. They paralleled trackage of the Cleveland, Southwestern & Columbus all the way between the two cities.

The other wholly-owned subsidiary of the LSE was the Sandusky, Fremont & Southern, organized to build track from Sandusky to Fremont that would provide a new and faster route from Cleveland to Toledo. Cars began operating over the new line in through service from Cleveland to Toledo on July 16, 1907 and the through limiteds made the run of 115 miles via Sandusky in 4 hours, a half hour better than the limited time on the run via Norwalk.

So much for the corporate background of the Lake Shore.

AFTER formal incorporation of the LSE on August 7, 1901 it proceeded to take over the many operating lines already described. In spite of financial troubles of the Everett-Moore syndicate, construction of the lines needed to complete the through route from Toledo to Cleveland went on steadily, and on December 7, 1901 the last break in the connection was ended when the Lorain-Ceylon Junction track was completed. A special run was made by company officials, who claimed that the 130-odd miles of track owned by a single company was tops in its field. Through service from Cleveland to Toledo did not start for a long time after the official run, as a bridge at Vermilion was not yet completed.

A three-mile line running off the Toledo-Fremont route south to Gibsonburg was completed in October, 1901. It was built to tap oil wells and there were ideas to extend it on to Lima and central Ohio, but it never was constructed beyond Gibsonburg. A single shuttle car served this short run almost to the last days of electric service on the rest of the system.

A record run for its time was made on track west of Norwalk by a party of Everett-Moore officials on September 1, 1902 in a Barney & Smith car. No. 18 hit 70 mph. for three miles and then 80 mph. for a half mile. Speed was always prominent on Lake Shore Electric runs, the

Continued on page 86

Open Car No. 9 bore lettering of People's Electric Ry. at Sandusky station of successor Sandusky, Milan & Norwalk Ry. in 1900. Soldiers' home station was beginning of line to Norwalk

Eugene Schmidt

Barney & Smith and Niles built many Lake Shore Electrics for predecessor and contemporary lines. No. 23, *above*, at Fremont carbarn, was wooden interurban constructed by B&S in 1900 for Toledo, Fostoria & Norwalk; number change came when LSE took over. No. 165, *below*, used in joint Lima-Cleveland service over Western Ohio Ry. route, was 61-footer turned out by Niles in 1907. In pre-LSE days camera-conscious riders, *left*, oozed out of Car 55 on Rocky River bridge of Lorain & Cleveland Electric

Jewett, too, got car orders from Lake Shore Electric, constructing No. 170, ***above***, which ended days as No. 1710 on Des Moines & Central Iowa, DM&CI going out of passenger business three years ago. ***Tuscarora, below***, No. 7540, of Detroit United Ry., was used in through service between auto city and Cleveland over LSE and DMT Short Line trackage. Casualty crossing, right, near Bellevue, O., took 19 lives when LSE car struck crowded bus in 1929; dirt road later became U.S. Highway 20

John H. Heller

Brill-built Car 65 faded away on LSE's short Gibsonburg branch line. Wooden vehicle dated back to 1903

Continued from page 83

big, heavy cars being natural for racing over the flat Ohio countryside. There were accidents, too, on occasions. These included head-on meets and steam road collisions. One bad accident occurred in the closing years of the road when a railway car demolished a passenger bus at a highway intersection.

Ten new interurban cars were ordered in 1903 in contemplation of heavy through traffic. Brill built these beauties, Nos. 60 to 69. Each car seated 42 passengers. They were luxury cars in their day, being equipped with water cooler, lavatory and smoking compartment. Placed in limited service between Cleveland and Toledo in October, 1903, they made the run in 4½ hours.

A map of the Lake Erie region will indicate competing service from Cleveland to Elyria and Norwalk among the Lake Shore Electric, the Cleveland, Southwestern & Columbus and the Lake Shore & Michigan Southern (now New York Central) steam road. To attract passenger business the LSE placed limited cars on the Cleveland-Norwalk run, covering the 58 miles in 2 hours 20 minutes. The Southwestern countered by inaugurating limited cars, making the run in slightly more time, 2 hours 30 minutes. The longer running time was compensated by the fact that the Southwestern sold round trip tickets for $1 while the Lake Shore and the LS&MS charged $1.25 for the same service. As a result, these two roads cut their fares to $1 even. This gave the Lake Shore most of the passenger business in the area, since the LS&MS did not give frequent service.

The Southwestern, not to be outdone, ran a special car from Cleveland to Norwalk in the remarkably short time of 1 hour 30 minutes, all other cars on the line being sidetracked to let the special through. On the next holiday, both the LSE and the Southwestern scheduled through cars from downtown Cleveland at the same time, and the Southwestern car made the run again in 1 hour 30 minutes. The Lake Shore Electric interurban, making record time as far as Vermilion, hit a broken wire which delayed the car. Not counting the delay, the LSE made the run in 1 hour 20 minutes.

It became apparent that the Lake Shore had the faster route. The LSE ran almost twice as many cars on the line as the Southwestern. In the end, the Lake Shore service outlasted the Southwestern to Norwalk by 15 years, since the Southwestern

cut its run back to Oberlin around 1924.

In contemplation of limited service on the through route via Sandusky, ten more interurbans were purchased in 1906. These were even heavier, longer and speedier than the old ones. The Niles Car Company built them. They were equipped then with arched windows having cathedral art glass in the upper section. Numbered 140-149, they were followed by another order of ten more passenger cars and five combines of similar lines from Niles. These became Nos. 150-159 and Nos. 160-165.

Those were years of expansion for the Lake Shore Electric. The Cleveland-Lorain line was double-tracked and the Sandusky-Fremont connection gave a 4-hour limited run from Cleveland to Toledo. The Lake Shore never did build a line south from Fremont, obtaining instead a joint interest in the Toledo, Fostoria & Fremont with the Western Ohio Railway, over whose tracks the LSE later operated limited service into Lima.

In 1912 the completion of through Cleveland-Lima service via the TF&F and the WO occurred. For this service the LSE bought two 61-foot interurban cars, Nos. 165 and 166. The Western Ohio also supplied two identical cars, Nos. 198 and 199. These were Jewett built. They ran via Fremont, Fostoria and Findlay into Lima, where connections were made with four other interurban routes.

Through service over the tracks of the Detroit, Monroe & Toledo Short Line Railway for the 52-mile run from Toledo into Detroit came next. Until 1916 passengers could make direct connections between the lines, but with the interchange of cars traffic was greatly expedited. The DM&T line rebuilt 30 Kuhlman wooden coaches for the new service, while the Lake Shore ordered 15 steel interurbans from Jewett. Traffic was heavy on the through route from Cleveland to Detroit, and trains of three and four cars were common. The LSE cars in the 140 and 150 group were equipped for multiple unit operation.

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FREIGHT service accounted for a good deal of the Lake Shore Electric's revenue, and freight trailers were interchanged with nearly all connecting lines. The Lake Shore's freight business was handled by the Electric Package Agency owned by several of the big interurban companies. The LSE had 20 freight motors and 62 freight trailers (five were automobile cars).

In the late 1920s the railwagon was developed in an attempt to answer the threat offered by trucks to the freight business. The railwagon was a highway trailer built to fit in a railway flatcar, with the trailer wheels hanging over the sides of the car. Three railwagons were carried on each flatcar. Unfortunately they came a little too late and were never put to the use they might have demanded.

On June 24, 1924 a cyclone struck Sandusky and Lorain, killing about 100 persons and destroying many transmission lines, trolley poles and high tension lines, including half of those on the Lorain Street Railroad. Two cars were overturned on the city streets, so powerful was the wind. The line from Beach Park to South Lorain (the original Avon Beach & Southern route) was badly damaged. It was never rebuilt; hence it became the first abandonment of the LSE system.

In 1926 the railway built a line around Sandusky so limited cars would not be

Steel and wood. Most modern freight motor type on LSE was Car 40, *above*, which hauled trailers. Wooden No. 30, *below*, product of Barney & Smith, pulled trailer, too, at State Street in Fremont

E. V. Emery

delayed in their through route. This was the last construction project the Lake Shore Electric ever attempted. A year before the LSE had purchased four big, steel passenger cars from the Eastern Michigan Railway. Two of these were rebuilt and placed in service, becoming Nos. 182 and 183 on the LSE. The other two remained in the yards and slowly deteriorated.

Late in the '20s the LSE bridge at Berlin Heights needed repairs but the company could not spare the cost, so through service over this branch line was terminated. A tripper car ran from Ceylon Junction to Berlin Heights, usually No. 23, an old Barney & Smith coach, and another car carried the passengers into Norwalk. The route from Sandusky to Norwalk dropped off in 1928. The LSE had used the old SM&N barn at Milan for a paint shop, and with the end of this railway route, the paint shop was moved to the main car shops at Sandusky.

Eventually the depression of the early '30s together with the decline in revenue from passenger and freight services under highway competition caused the downfall of this electric railway system. The valuable traffic from freight interchange and through passenger service on the DM&T and WO was vital to the existence of the Lake Shore line, but unfortunately both roads fell prey to the depression at its worst, in 1932. The Western Ohio and the Toledo, Fostoria & Fremont (the latter owner jointly by LSE and WO) quit on January 16, 1932. Late in the same year the valuable Toledo-Detroit service ended with the abandonment of the Eastern Michigan & Toledo Railroad, (successor to the DM&T), on October 4, 1932.

This abandonment meant that all freight carried from Detroit to Cleveland went to truck lines. As each of the interurban lines that the LSE exchanged its electric freight trailers with gave up rail service, the LSE freight income suffered. Finally, in 1935 only the interchange of freight with the Cincinnati & Lake Erie was left.

It had been a common sight in the late night hours to see three- and four-car freight trains of the C&LE snaking along Toledo streets enroute to Cleveland, as local ordinances forbade more than two cars in interurban freights in Toledo except from midnight to six in the morning; so it was during those hours when most of the freight traffic was handled.

In 1935 labor trouble started among the freight employes of the Lake Shore Electric. It was never solved, and in 1937, after a strike by 150 freight workers, the Lake Shore abandoned its entire freight traffic. The road had been in financial troubles since January 30, 1933 when it was forced to go into receivership.

Thereafter passenger service was cut considerably, although limited service was maintained between Cleveland and Toledo right to the end. When the Toledo tracks on Orange Street were removed by the local streetcar company, the LSE cars waited on tracks in the freight yard next to the *Blade* building. This was soon given up and the C&LE freight yards were used for layovers. On November 19, 1937 the C&LE ceased operation of its route from Lima to Toledo, so the LSE cars thereafter laid over in the street at Belmont and 11th, using the old C&LE wye to turn around for the return trip.

THE END approached on January 4, 1938 at a receiver's sale where there were no bidders except the finance company which was owed $812,015 by the road. The firm took over and tried to operate for an experimental period, to see if the line could continue. In the meantime the 400 employes tried desperately to find some means to purchase the road to operate it themselves. It proved too much of a problem, and on midnight of May 14, 1938, the last interurban made the run from Cleveland to Toledo. The next day buses of the Lake Shore Coach Company, an LSE subsidiary, took over service, as it did on the more profitable runs.

Among the workers who were thrown out of jobs by the abandonment was Motorman William Lang, who had 38 years' service. He is remembered yet for his heroic rescue of a two-year-old girl,

Bateham Studio

Farewell. In May 1938 Car 18 pulled Car 115 through Norwalk. They were last to go through that city

Lelia Smith, who was playing on the tracks as his Toledo-bound limited car rounded a curve at a speed of 55 miles an hour. He jammed on the brakes but the wheels slid on the rail and, seeing that the car would not stop in time, he climbed out on the shaky car fender, reached out and scooped the child to safety. For his action he received the Carnegie Medal and an ICC medal approved by President Roosevelt.

Upon abandonment of the road, almost all equipment was scrapped. Few interurbans wanted the big Lake Shore cars in 1938. Only three were sold, Jewett cars 170, 179 and 180, going to the Des Moines & Central Iowa Railway (described in *Perry & Colfax Interurban,* May, 1951). These continued to operate as DM&CI cars 1710, 1712 and 1714 until the railway gave up passenger service in September, 1949. Ten city cars of the Lorain Street Railroad were sold to the Birmingham Electric Company in Alabama. These were fairly modern St. Louis-builts, purchased by the Lorain line in 1927. They operated in Birmingham as Nos. 521-530 until last year when they were scrapped after abandonment of several Birmingham routes.

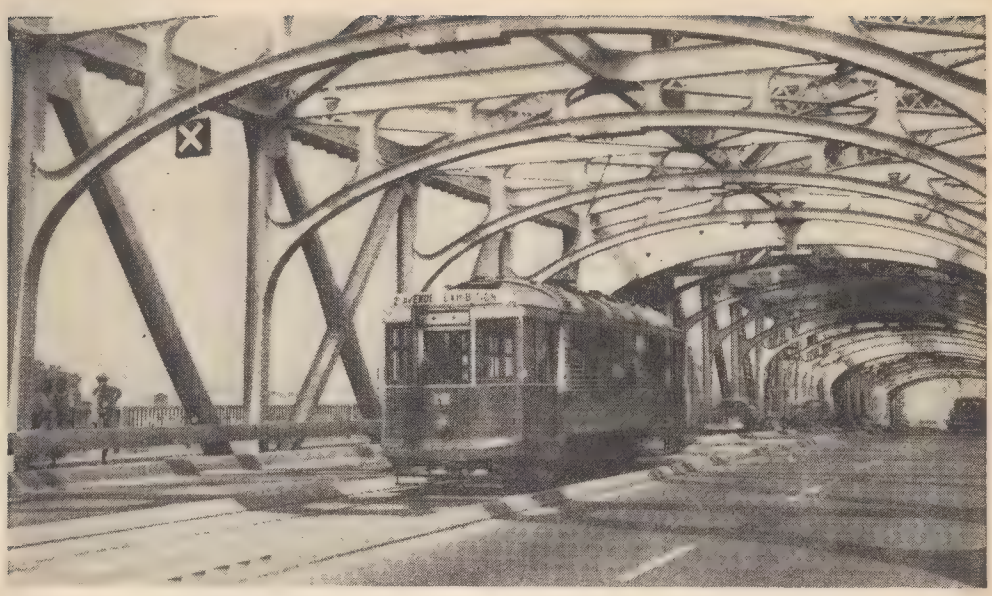
So passed into memory the last vestige of the Lake Shore Electric Railway, a magnificent interurban system, still remembered today even after passage of more than a decade since it last gave service.

Coming Next Month:

ILLINOIS TERMINAL TODAY

A Photo Story of the 476-Mile Electric IT Railroad

Steve Maguire



Addison H. Laflin Jr.

Away from home, 1200 miles, to be exact. Saskatoon Municipal Ry.'s No. 12, on special fantrip of San Francisco Bay Area, crosses M Street Bridge of Sacramento Northern trolley freight trackage

Carbarn Comment

STEVE MAGUIRE

THIRTIETH of June, 1951 will go into electric railway history as one of its darkest moments, for on this date came the end of two unusual railway lines in the United States. The municipally-owned Fort Collins streetcar system, operated entirely by Birney cars, rolled its last, through the action of city officials who claimed the line operated at a deficit and allowed a bus outfit to come in and replace these little cars. The change is expressed as being only *experimental;* however, few believe the cars will ever come back into service.

Until the bus substitution, Fort Collins, Colo. had been the Mecca of tourists and railfans for several years, since it was the only city operating an entire fleet of the four-wheeled Birney cars. Thousands, some years ago, were operated in all parts of the nation. Today there are none, for the first time since Charles O. Birney designed the original in 1916. There are a few individual cars scattered around the country, one in Montreal retained by the Tramways Company, another one owned by the Bay Area Railfans and kept in the Oakland barn of the Key System. The Branford group has Connecticut Co. 2350, a Birney, at their barn in Short Beach, Conn. A few more have been preserved for historical purposes, but to find one in operation you must now go to Matanzas, Cuba, South America, New Zealand, Australia and such far-distant lands. Probably some of our regular readers will recall our stories of Birney and the car which bears his name.*

In the Midwest, too, came the finale for the Milwaukee-Waukesha interurban line operated by the Milwaukee Rapid Transit, formerly the Speedrail outfit. Most readers recall our many items of news on this line when Jay E. Maeder rescued it from bustitution and rehabilitated it for rail service only a couple of years ago. It was primarily the tragic railfan wreck last Labor Day weekend, resulting in ten deaths and many injuries, that put the line so deeply into the red the Federal Bank-

**Railroad, Aug., Sept. '44.*

ruptcy Court decreed that the interurban line cease operation on June 30th.

In spite of efforts to save the road, the end came as ordered and we can only wonder what might have been, had it not been for the unfortunate wreck. There is yet some chance that operation may be resumed; however, as time goes by it appears less likely. The Waukesha line is almost a rapid transit route, and if allowed to operate, could attract sufficient riders, with the growing population in the area, to make it profitable.

Along with the end of the Milwaukee ex-Speedrail line will be the finale for the many boomer interurban cars used on the line. The familiar Cincinnati Car Co. curved-side lightweights are one of the last of their type so familiar in the eastern U. S. in the 1920s and 1930s. This particular type of car was exceptionally fast for a lightweight, and its value has been proved since; instead of being scrapped when an operating line quit, often a lightweight would be sold to another route. On the Speedrail line, six Cincinnati-type cars came from the Indianapolis & Southeastern, which sold them to the Inter City Rapid Transit of Massillon, Ohio. In turn they were sold to the Shaker Heights R. T. and finally to Speedrail. One other car was reconditioned only three months before abandonment; it came from the Dayton & Troy Electric via the Lehigh Valley Transit.

The only curved-side Cincinnati lightweights of the original design now operating are in Birmingham, Ala., and their future is limited since they will go out of service on abandonment of the Ensley line there. They are presently listed for sale, with no buyers located. These cars were used on the Stark Electric Railroad of Salem, O., and were reconditioned by the St. Louis Car Company in 1940, with center doors added; then they were shipped to Birmingham and placed in service. West Penn Ry. operates one Cincinnati-type car of modified design on its South Connellsville line, but this is not of the standard curved-side design.

My story of curved-side cars of the Cincinnati Car Co.* listed every one of the design built, from the original order of the Kentucky Traction & Terminal in 1922 to the last orders in 1929, outshopped just before the car builders went broke in the depression.

Another abandonment is being sought in Milwaukee, this one by the North Shore Line, which claims that a new local bus route has taken too much patronage from its local line on South 5th and 6th Streets in Milwaukee. The route formerly used Birney cars but presently uses heavy double-truck cars once operated in Waukegan, Ill. A portion of this line runs over the interurban track in the city.

* * *

BAY AREA railfans of Oakland, Calif. were treated to a real mystery trip, to a secret rendezvous known only to five members of the fan group who engineered it. There were 29 fans assembled at the Southern Pacific station one early June morning, with $8 tickets in their pockets, but with no idea of where they were going. Trusting souls, these juicefans!

They were well rewarded, however, when they left SP train No. 224 at Sacramento and went to Front Street, location of the juice freight tracks of the Sacramento Northern Ry. in the state capital city. It had been 4½ years since a passenger trolley car operated in that city, but down the street came a little single-trucked affair of unfamiliar style and the number 12.

Finally the story came out. Eldon W. Lucy, president of the Bay Area group had purchased the car from the Saskatoon Municipal Ry. after it had gone out of service last year. It was shipped via CP, GN and WP routes for a 2478-mile rail trip and while enroute to Oakland to be added to the group's growing collection of streetcars, was set on a siding at Sacramento for the special fantrip over the electrified lines in and about Sacramento. After the trip No. 12 continued on its journey to Oakland where it now is located.

*Railroad, June '46.

William D. Middleton

Lightweight No. 60 of Milwaukee Speedrail heads for Waukesha via West Junction before abandonment. Cincinnati Car Co. built ex-Shaker Heights vehicle

STEAM and electric fans will be interested in the recently-published history of *The Metropolitan Railway* by C. Baker, offered for sale in this country by Owen Davies of 1214 North LaSalle Street, Chicago 10, at $2.25. This 73-page book gives a fine story of the development of London's Metropolitan line, from the early days of the steam trains to the present-day electrified subway and suburban service. The book is well-illustrated with steam and electric views.

Curved-side lightweights like Cincinnati-built No. 104 of Nashville-Franklin Ry. were familiar on eastern interurban roads in '20s and '30s. Highway forced N-F to quit in '41

Steve Maguire

Steve Maguire

Fort Collins Municipal Ry. was last U.S. line to run Birneys regularly. Revenue drop put four-wheelers like No. 22 out of business in June

And the June issue of *Turnout,* monthly publication of the Boston Chapter of NRHS, contains a 12-page illustrated story of the Main Line elevated route in Boston, together with an all-time roster of equipment on the route. The issue is timed with the 50th anniversary of the opening of the elevated route, which ran its first train from Sullivan Square Terminal to Dudley Street on June 10, 1901. Copies may be obtained from William V. Kenney, 90 Walworth Street, Boston 31, for 27 cents each, postpaid.

Newest publication of *Transportation,* issued by the Connecticut Valley chapters of NRHS and ERA, contains 20 pages of history of the Exeter, Hampton & Amesbury Street Ry. written by O. R. Cummings and containing some excellent old photos of the road which ran along the east shore of New Hampshire. In addition, there are interesting stories of the New Haven's Maybrook line and the Poughkeepsie bridge. In all, the 38 pages are well worth the price of $1. Copies may be had from Roger Borrup, Warehouse Point, Conn.

* * *

ONE of the old landmarks of New Hampshire's mountain country is gone, reports Forest Horton of 40 Main Street, Haverhill, Mass. The Mt. Uncanoonuc Incline Railway which operated an electric incline line to the top of the mountain at Goffstown, N. H., became a casualty of the 1950 hurricane. Horton says, "I visited Henry Laxon, the owner of the line, and was disappointed to find that all rail was gone and trucks and motors from the car have been sold for scrap. The cars are intact with bodies jacked up, one at the base of the incline and the other at the Summit station. The deciding factor in scrapping of the line was the recent hurricane that blew over and demolished the Summit station. In addition, a forest fire the year before ruined the cable.

"I climbed the incline to the turnout and after viewing at close range the rotted ties and stringers, readily agreed that there was nothing that could be done other than to scrap the road.

* * *

WASHINGTON & Old Dominion Ry., a former interurban line Dieselized just prior to World War II, has finally given up its passenger service. Gas-electric cars had provided passenger and RPO service in the last years. Passenger service had been suspended in April 1941, but the war required restoration of the service.

New Publication

Model Railroading, prepared by editorial staff of Lionel Corporation, 256 pages. Illustrated with photos, diagrams, charts, cartoons. Bantam Books, New York, 25 cents.

MR. LIONEL (Joshua Lionel Cowen) has been in the toy train business for 50 years. There's no telling how many father-and-son friendships have been disrupted by Lionel and his equally famous predecessors, the Ives family of Bridgeport, Conn. To find someone who hasn't watched Papa monopolize the trains he bought for Sonny is a feat rare indeed.

After several hours of play by the father, under the thin guise of "Let me show you how they work," the son becomes more than impatient. But after 50 years in the business Papa Lionel is worth listening to. He and his Lionel Corporation editorial staff have gathered their vast knowledge into a tinplate bible, *Model Railroading*.

In twenty chapters of text and five appendices, heavily illustrated with photos and drawings, the book rolls along in easy-to-read anecdotal style, from some reasons you'll like such railroading to scenery tricks that make your road come to life. And through to the arguments for and against clubs.

Through the magic of electronic control the model fan becomes "at one time, engineer, brakeman, conductor, yardmaster, dispatcher, as well as owner and general manager."

With the resources at its command Lionel has compiled a pocket book that covers the track more thoroughly than hard-cover volumes costing twelve to twenty quarters more. Purposely or otherwise, *Model Railroading* advertises Lionel without that blatant hucksterism that irritates a customer against a product.

Of course the book has several minor faults but they're almost undiscernible. Among them is a hazy explanation why Lionel still manufactures old-fashioned three-rail track with the third-rail in the middle. Three-rail track is one of the few false products in a corporation with talent enough to manufacture locomotives that belch smoke, and freight cars of milk, cattle and lumber that are unloaded by remote control.

Otherwise, *Model Railroading* is the book for the fan, beginning or advanced. From the opening page it captures the feeling: "Near at hand a little freight train scurries into a siding, a switch is thrown, and the fast freight passes safely by with screaming whistle. A moment later it curves off into the hills, and not a minute afterwards a sleek passenger train glides past in the opposite direction, pulled by an effortless Diesel engine. Only then does the little way freight pull out of the siding and resume its delivery of cars on sidings here and there along the line."

Lionel advises the model railfan not to buy everything at once; not to construct the road in one day—"it's just a matter of doing each little bit at a time, and in the end they all add up to something fine."

As big and fine as Bob McKeand's. He runs an amazing miniature New York Central in his Westchester County, N. Y. home; passes out divisional assignments every Friday night to his hobbyist friends.

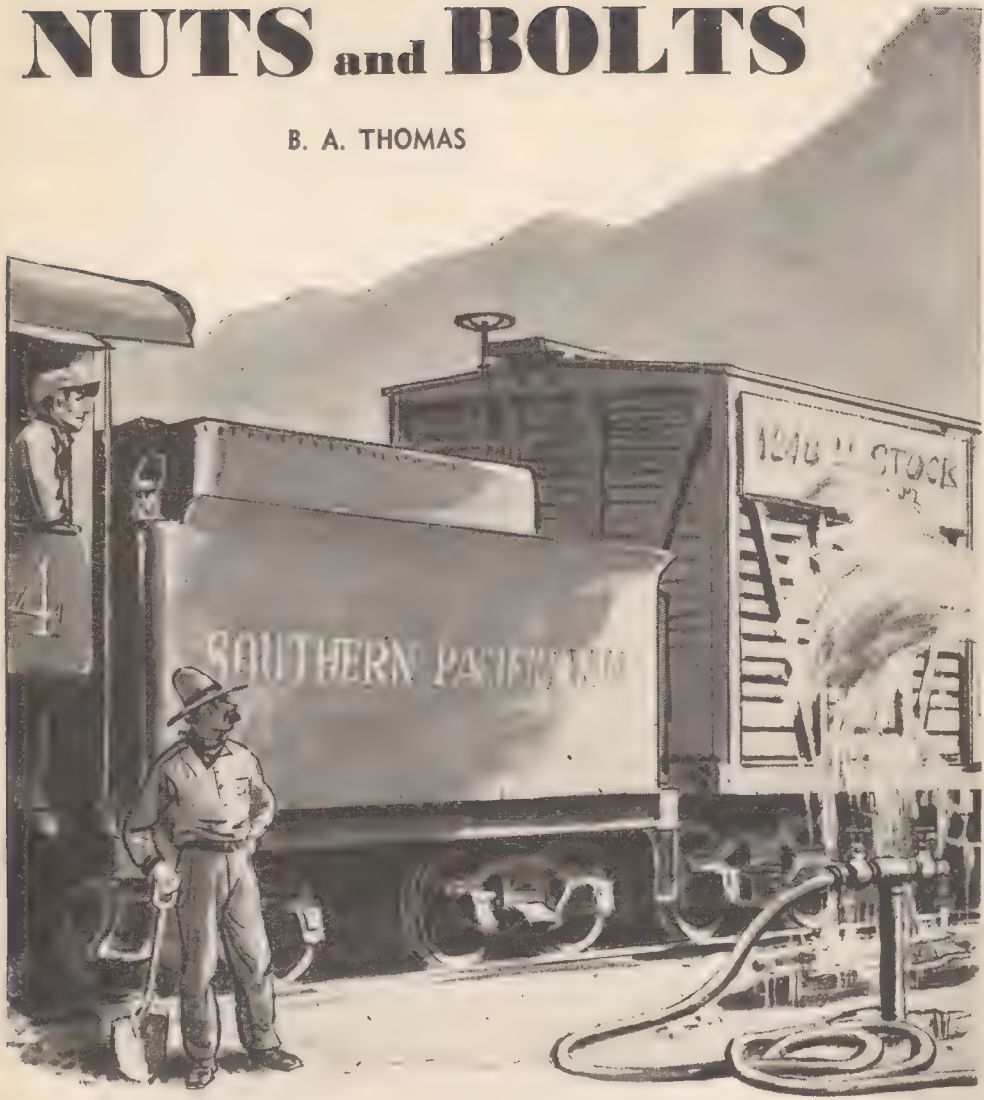
In his cellar Grand Central Terminal is on a shoulder-high platform. From there the road descends in a series of dazzling loops to the floor, occupied mainly by a large branch line. Then the main line runs out of the house through a hole chopped in a fourteen-inch stone wall. Along two sides of the house trackage runs under the porch; forms a loop and turnaround with storage tracks. From the porch the tracks go around the other two sides of the house and into the garage, Chicago's LaSalle Street Station.

Neighbors say McKeand hopes to run the road up to the porch roof and into the bedroom. If he does, he'll probably have to sleep on the cellar tracks.

T.W.S.

NUTS and BOLTS

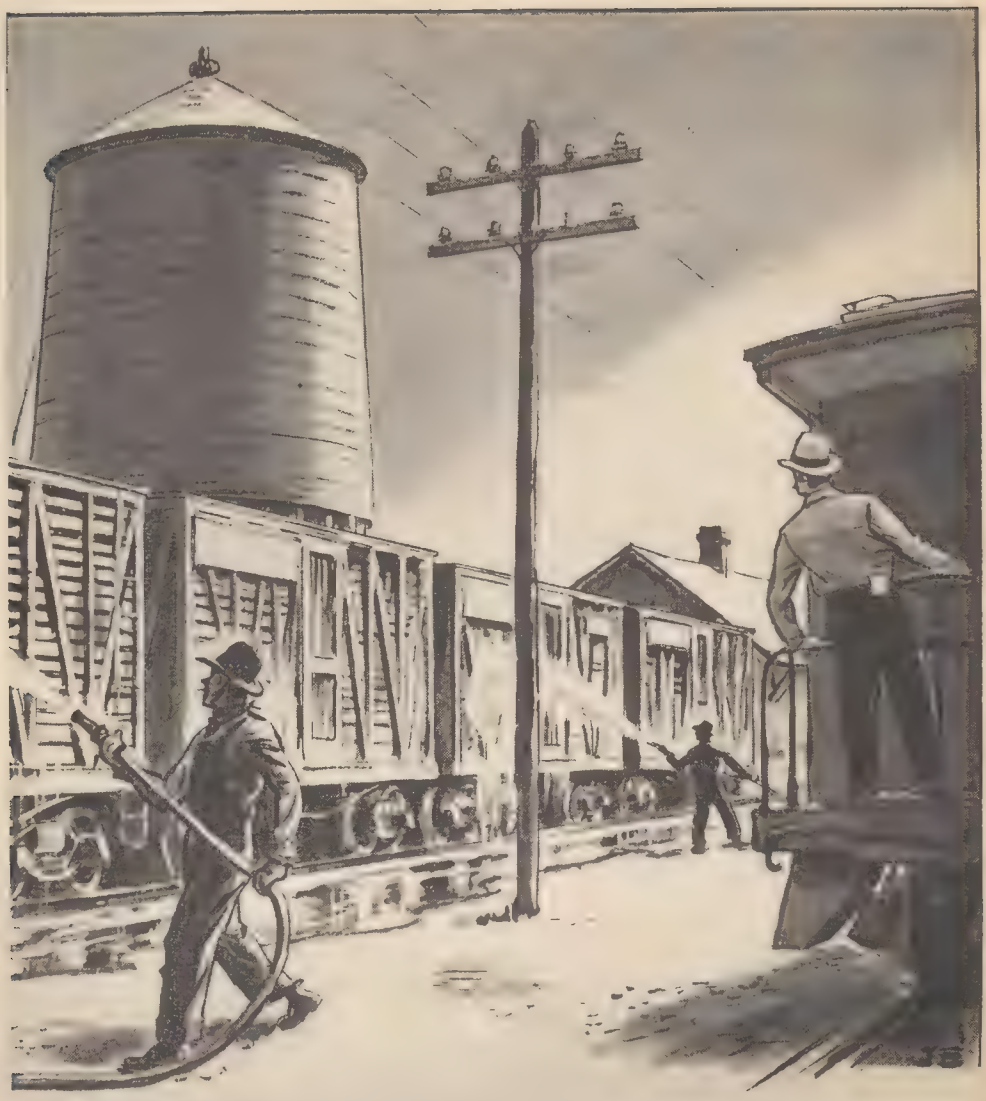
B. A. THOMAS



DOG TOWN, River Station, Bull Ring, were interesting monickers. Coupled with my acquaintance of a bundle of good boomers who worked there, they created the urge for me to accept a berth with the SP at Los Angeles.

Old Central Station, a wooden structure built in the year one, with huge palm trees out in front, gave me a real welcome on my first arrival. The station was packed with people, bands playing, all for me and my wife, I thought—until informed that the Elks were holding their national convention there. However, the music and the crowd went over big, for the bride and I were on our honeymoon.

Charles F. Donnatin, the trainsmaster, presented me with the *Book of Rules* and the regular routine of instructions. A great guy, that Charlie Donnatin. Inches over six feet, a good face, a fellow you were glad to be working with. Charlie climbed the ladder up to his resting place —the seat of the general manager. He was



The sheep and porkers had to be wetted down to keep them from dieing of the desert heat

efficient, honorable and understanding. His memory is cherished by all who ever knew him.

Finally the great night arrived—we were called for an extra east with a "made up crew." I was made the parlor brakeman, and found, to my surprise, that the caboose was all stocked. Other places I had worked, the brakeman put supplies in the cabooses; but the Southern Pacific was different in many ways.

"Grab yerself a club and hit the deck." After that bit of mountain talk, the conductor and I crawled through the cupola to the top of the train that had begun weaving its way down the east side of Beaumont Hill, heading for the Imperial Valley, where I was to learn something of heat.

It was about 8:30 in the morning when we started off the hump, but the sun was already bearing down about like it does in your town at noon. We had left Los Angeles the night before at 10 p.m., and

my flannel shirt felt, at that time, mighty comfy. But it was excess baggage that morning. However, I stayed with it, vest and all.

About half-way down the hill, I wandered over the top of the train to where the swing-man was located. I wanted to see who he was, what he looked like, and find out how he was enjoying the weather. He wasn't enjoying it. Like myself, he was making his first trip, and his last. He explained that he was on leave of absence from some railroad in St. Louis. He and his wife had come to Los Angeles for a visit. Then he heard that the SP was hiring; so he gave them a whirl. But in that heat all he could think about was his home town and its famous beer. He said, "You know, mister, I'd die if I had to work in this heat." I agreed with him that it was a trifle warm. Then he asked, "Say, ya gotta water bucket back there in the crummy?" I nodded my head. "Then bring it over to the head end when we get in. We'll sure fill 'er up."

Indio was our terminal. In those days we put our cabooses away on the caboose track, under some big cottonwood trees. I grabbed a nice new water bucket and the two of us started looking for the town, and a place to fill the pail with beer. But there was no such animal—Indio was in the middle of an Indian reservation. Consequently, we found no booze. I thought my chum was going to cry.

"That settles it. Any place that don't sell beer ain't fit to live in." And he headed for the yard office, where he told the yardmaster that he had quit right there. Then he wired his wife to take the next train for St. Louis, that he would meet her in Indio. Which he did.

There was only one nice thing about Indio. That was the ice water fountain at the west end of the club house. You can imagine that this got a big play. A little old log shack did for a general store, post office and almost anything else you might need—providing you didn't need much. A few company shacks for certain employes, a roundhouse, the club house and another shack where an old gal with buttermilk eyes dished out her "first aid."

Today Indio is a business center with banks, hotels, saloons, comfortable residential district, air-conditioned homes, where they don't mind the heat as we did in 1913. That morning I drew a bed in the club house. Upstairs where they put me was a ram pasture with five or six men trying to sleep in the heat. The room was practically open, but regardless of how it was, the heat was like a Turkish bath. Most of the sleepers had removed the mattresses from their cots, and the perspiration dripped from their bodies onto the floor. That evening it was 120 at midnight—a tough night to sleep.

While lounging about the club house that afternoon, I ran into Pat Breen. I was surprised when he told me that he was a full-fledged hoghead, because when I had known him on the Northern Pacific a few years before, he was just an ordinary passenger brakeman. Later on, a brakeman approached me with a trade proposition. His crew would soon be called for the east, while my crew would be returning to Los Angeles. He offered me a meal ticket and a five-case note to trade off with him. Which I did. The boys with seniority kept the younger generation down on the desert during the hot summer, and then traded off with them when it got cold and rainy around L.A. in the winter time.

Finally we were called for an extra east and slipped on down the line to Imperial Junction, where a branch line takes off through the sand, and sidewinders, to Calexico, just across the ditch from Mexicali, Mexico. I had made myself a promise when I left the Great Northern that I'd never work for a railroad where I had to double. But we doubled out of Imperial Junction that night, and on our way back we doubled out of Yuma, the terminal.

Although it was *mucho caliente* in Yuma, they did keep the saloons comfortable—much cooler than our caboose. It was fascinating to observe the bartender serving a drink of liquor. He kept the glasses buried in crushed ice, while the liquor was poured from a silver pitch-

er which also was kept in the ice. The procedure was so entrancing, so soothing to my hot, neglected pipes, that I had drunk six injections before the bartender warned, "You must be a stranger on the desert. Too much whiskey is very bad for you." I agreed with him. Whiskey was bad for me anywhere.

But when I thought of Indio, I thought of smugglers. So I took a couple of quarts to the caboose, just in case of a long dry spell again. We got back to Indio Sunday morning, just missing a small cloudburst in the desert that washed out a bridge on the Calexico Branch. The local freight crew, laying over in Calexico Sunday, was put into service as a passenger crew, connecting with the regular main line trains at Indio.

I WAS acquainted with one of the brakemen on this crew, a fellow named Hall. During our conversation I told him about the trade I had made with the brakeman; then, with a little bragging, I explained that they had decided to send my crew back to Los Angeles. So I was ahead five dollars, a meal ticket, a trip to Yuma; I had wet my whistle, and soon I'd be in Los Angeles.

But my friend Hall changed my mind. He put up such a sob story about being fried with the heat, how much he missed his sweetheart, that I traded off with him. Then he introduced me to his conductor. That's how I met Bill Knapke, a mighty swell fellow, even though he wasn't just exactly "work brittle."

That evening in Calexico I met the brakeman who was to be my running mate on the crew. His name was McFarland, a big two-fisted drinker, but a good car hand and a horse for work; and that was just what it took on this local. Mac had been on this job for some time and knew the ropes.

The next morning we made up our train in the yard. Our last move was the loading of some stock, which I found occurred every other day. This stock, mostly hogs and sheep, suffered severely in the heat. At Imperial Junction the company had arranged several hydrants with hose attached, to wet down the pigs. At other places along the line, we'd pull the cars slowly by water tanks, where they could be flooded down. But in spite of these precautions, there was considerable loss.

At Heber, first station out of Calexico, flat-bottomed trucks loaded with butter and cream were backed up to the loading platform, waiting for us. Mac and I loaded this, did the station switching and then headed for El Centro, the next town. El Centro, Imperial and Brawley were the principal towns. They were growing rapidly at the time and required great gobs of switching. We sure needed a third man. He could at least have been loading the way freight while Mac and I did the switching. But the union was just cutting its eye teeth at this time.

It was at the next town, Imperial, that I hit on an idea to take the curse off the heat. In this place there was a beer depot, where I bought bottled beer by the barrel. On the trips west I'd transfer a dozen bottles from the barrel into a large lard can, placing this in the ice tank in one of the refrigerators.

Among the nice things in the Southern Pacific Rule Book, were the instructions for brakeman not to run for switches on the desert. However, they still clung to the out-moded rule of riding out on top through blind sidings.

At Imperial Junction, after Mac and I had done the chores, we'd go to "The Eating Car" for dinner. This place was run by a lady who was an excellent cook and the food was splendid. Such a relief from the garbage we had to take in "Big Foot's" in Calexico, or the "Gag & Gulp It" in Indio.

Leaving the Junction, I'd get the pad I had made out of sacks, douse it in the water, then use it to sit on. The roof of the car would be so hot that you couldn't keep your bare hand on it.

Our hands were so calloused from handling the hot iron that I had corns on mine. So, perched on the car with my beer, with the wet pad under me, my shoes off and my legs dangling in the open ice

tank, I'd suffer along for the next thirty miles to Salton Sea, where we generally met a train. The water looked good to Mac and me; we'd take a swim and change our clothes nearly every day. After washing our clothes, we'd hang 'em in the caboose between the two open side doors and the hot, thirsty wind would dry them in five minutes.

Our next work stop would be Mecca, noted for its pure drinking water. Thousands of tank car loads were hauled from there, to be distributed at other points where the water was not so good. At this time, acres of date palms were being planted between Coachella and Indio. Now they are very tall and make quite a forest.

Then came Indio, the terminal. Mac and I would flush out the crummy with water from a hydrant, take a shower from a homemade five-gallon oil-can shower, and then try and snare a little shut-eye in spite of the heat and the mosquitoes. Eventually, we'd be so exhausted that we'd be dead to the world.

The return trip would be heavier because of the material hauled into the growing towns on the branch. The Sixteen-Hour Law generally got us before we finished weighing cars and putting our train away. The immaculate Knapke, in his white shoes, light trousers, white shirt, and Panama hat, was not concerned about the work. He lived in Calexico, and his two "hosses" did the chores.

Every second Saturday night, I'd ask Los Angeles for permission to deadhead home for a few hour's visit with my wife on Sunday. When this request was granted and we got through our work in time to catch the only train out of there, I'd grab a berth and get some much-needed sleep on the way to L.A. The train didn't get in until nearly 10 in the morning.

But those few hours were worth the struggle. When I was certain of making the trip, I'd wire my wife. "Have a case of beer and a quart of liquor sitting on the front porch Sunday." And it was there. What I couldn't drink, I'd bundle up and take back with me. One night that bundle came near to being my downfall.

For some reason, a troop of our soldiers were stationed in Calexico. This particular Sunday, they were playing ball in El Centro and returned home on the train. I met a couple of these soldiers, and treated them to the last of my bottle. When we got to Calexico, they decided they had to have something more to drink, and that meant crossing the line to Mexicali. There was no booze in Calexico.

I took them to the caboose, where they changed their uniforms for civilian clothes. Then they took a chance. But the officers at the gate turned us back, saying, "The line has been closed since nine o'clock. You can't come across." This stopped my two soldier chums, and they went back to their own camp. But I knew that down by our roundhouse there was a place where I could sneak across; which I did.

THE ONLY light that I could see in the entire place was upstairs in a two-story building. I had been there once before, and knew it was a dance hall and gambling place. At that time, Mexicali wasn't the safest place for a gringo to be, day or night. When I got around behind the buildings, looking for a stairway, I ran into a high board fence.

I rooted around in the dark behind the buildings and found enough boxes to get me over the fence. Several days later, I found out that the fence extended only about thirty feet, and that I could have walked around it. The Mexican bar dog let me in and served me a few drinks. After that I joined some others who were gambling in another room. For no good reason, I got lucky, and the glare in the eyes of the Mexican gamblers wasn't exactly encouraging.

I bought drinks for the crowd, plunged, played recklessly, but still kept winning. About 3 a.m. I told the boss who I was, and that the call-boy would be after me about 5 a.m. Then he pointed out a room that I could flop in. I asked for an alarm clock, and one of the gals loaned me hers.

I tried to buy a bottle of liquor, but the boss with the fiery eyes said, "No. You get' em when you get up."

Inside the room I found the window open and unscreened. I quietly lowered myself from the sill, dropping to the ground. I left Mexicali, but fast. I've always figured that if I hadn't got away, I would've got a knife between my ribs and nobody would ever have known what had become of me.

In spite of the heat of the desert, I liked the local, and still might be down there—but for a pair of shoes.

The Southern Pacific dining room in the club house was as big as the exercising lot at a race track, so big that lacking roller skates the beanery queen couldn't give good service.

One morning we were in there for breakfast, just as a train stopped outside. The counter soon filled up with passengers, all wanting service, and speed, so they wouldn't miss their train. Consequently the biscuit shooter was a busy gal, "skating" from one end to the other.

I hadn't noticed the big slob who was sitting beside me until he was served his hot cakes; then every one in the place noticed him. He bellered out, "What's the matter with these hot cakes? Look at the size of 'em!" The gal stopped in her mad rush to apologize. "I'm sorry," she said, "If there is anything wrong with your order, I'm sure the chef will gladly exchange it for you."

But he kept bawling her out in front of all the people until I shoved the catsup bottle over toward her, and said, "Here, sister, take this and crown him. I'll pay your fine." The big bozo just glared at me, then got up and walked out without saying a word. After he had gone, Mac said, "That was swell. But I think it's curtains for you now. That was the trainmaster."

But I never heard anything more about it. Later, I ran out of shoe leather. Necessity caused me to have to buy the only pair of shoes in the "Little Log Store."

oh-oh, Dry Scalp!

"... IMAGINE ME dancing with a scarecrow! How can he be so careless about his hair? It's straggly, unkempt, and ... Oh-oh—loose dandruff! He's got Dry Scalp, all right. He needs 'Vaseline' Hair Tonic."

Hair looks better... scalp feels better... when you check Dry Scalp

HE TOOK HER TIP, and look at his hair now! 'Vaseline' Hair Tonic can do as much for you. Just a few drops a day check loose dandruff ... keep hair naturally good-looking. It contains no alcohol or other drying ingredients. Gives double care to both scalp and hair ... and it's economical, too!

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The tallowpot landed in the oil from the tank

They didn't fit. Soon my feet were blistered; then the dye from the leather got into the sores and I really had a bad time with my feet. This meant back to L.A., and I never returned to the local.

One day after my dogs got well, I was called for a Mojave extra with a "made up crew". The conductor, "Fat" Lathrop, McGuiggan, the head man, and myself were Los Angeles Division men. The rear donnicker was a San Joaquin passenger brakeman. We were nearly sixteen hours making the trip. Upon our arrival there, we ate and went to bed, the three of us in one room. During the evening I woke up and noticed that the light was burning. The conductor was gone. McGuiggan said that the conductor had been called. So we dressed and went down to see why we hadn't been called.

We found Fat Lathrop checking out in the yard office. A very officious guy, who, we were soon to discover, was the trainm[illegible], informed us that we were being held there for work train service on the Searles Branch.

He also informed us, "You're just

Southern Pacific brakemen, and 'll go wherever we want ya, whether ya like it on not." And I didn't like it. I explained that we didn't belong on that division, that neither of us had the clothes or the money with us for a siege of work-train service. Then he promised, "I'll have a crew down here to relieve you in a day or so."

We drew a newly promoted man for conductor. Like many other new conductors, he was a nervous wreck, wearing the case off his watch, yankin' it out of his pocket every minute or so, staring blankly at the dial. I don't recall his name, but if he's alive now he's got his seniority all wrapped up in an arm chair. Or should have.

This work train was really a supply train. We left Mojave that evening with a few cars of supplies for Searles, where some railroad construction was in progress. Arriving there, we set our loads out, picked up the empties for the return trip, then Mac turned the engine, which was a big one with a different engineer each trip. I made four trips up there, and the engine ran off the wye three times. Mac would drop off and when the engine was over the switch, he'd swing 'em down. Then the hogger'd shut off and let the engine roll until she hit the ground.

We generally got back to Mojave in time to grab some water cars and go up the hump to Tehachapi, where we'd fill 'em and return to Mojave and tie up. Mojave in those days was just a dot in the sand, and just as hot as Indio. All the business places faced the depot so they could see who got off the trains without stopping their work. One thing for sure, the saloons were cooler than the waiting room to lounge in, and they did sell cold beer.

Coming back from Searles the last night of my trip, we stopped at Rand, a blind siding, to pick up a small empty boxcar that had been tagged "hotbox" while loaded. I examined the journal, which I found smooth, replaced the old dope with new, then gave her a few squirts of oil and felt satisfied that, being empty, she'd run five or six miles into Mojave without any trouble.

But the young conductor thought differently, insisting that I brass the car. I suggested that he brass it, that I wouldn't; then we started for Mojave. The branch runs parallel with the main line for some distance, coming into the yard, and things are protected in the yard from runaway cars and the like by a derail set for this purpose.

COMING down that hill into Mojave is like dropping into a well, and this particular morning our hogger let 'er slide down the grade in nothing flat. When I figured he was getting close to that derail, I braced myself up there in the cupola, and waited. Then it happened; we were all stopped. The conductor pulled himself out from under a table, where he had been writing, and growled, "I guess you wish you'd brassed that car now." I mentioned something about his getting an armload of frogs, to put the engine back on the rail. I grabbed my lamp and a bunch of fusees, and started to find out if any one was hurt.

We had only nine cars, and seven of these were piled up. When I hollered, asking if any one was hurt, the hogger, who was several yards out in the sage brush, replied that he was all right. McGuiggan, the brakeman, was nursing a sprained ankle. I've always figured that his ankle business was a smart stunt; for this they deadheaded him home. The tallowpot got the toughest deal of all. He landed in the oil from the tank when the engine turned over, and although not hurt he was covered with oil from head to foot.

It was still dark, just breaking dawn. We heard the passenger engine of *The Angel,* crack train of the Santa Fe, whistling for the station, coming down off Tehachapi Mountain like a bat out of hell. Don't ask me why, 'cause I'll never know; but for some reason I got up on the main line just in time to rip the cap off a fusee and flag *The Angel.* There was a little fill there on the main line just opposite our wreck. A pair of wheels from

our pile-up had rolled up there and straddled a rail on the main line. If the varnish had hit that, there'd've been a real spill.

That evening our supply train didn't go to Searles. After dinner at the Harvey House that night, I drifted into one of the saloons to pass the time away playing solo, a game I'd learned to play in Montana. During the evening the bartender told me that a "party" wanted to see me in the room in the rear, known as the wine room. The party was a gal from the Harvey House, a very stout gal they called "The Mallet" on account of her size.

She was alone and invited me to have a drink with her. I did. And during the drink a man came in and handed her a five-dollar bill. After a couple of drinks, she left, and I returned to the solo game. I don't remember seeing her again. However, when the jealous old buzzard found out that it was his money that was buying our drinks, he immediately arranged to have me canned. Later on, there was some satisfaction in knowing that the same trainmaster that got my job eventually found himself behind the eight ball and was let out for Rule G, the same as I.

A month or so later, I met a discharged dining-car conductor who told me the Southern Pacific was short of stewards. He wised me up on the approach, and I was soon introducing myself to Mr. David Lusk, superintendent at Los Angeles, as a hotel manager from New York City. At that time, if he had asked me the name of a hotel in New York, I wouldn't have known one. My reason for being on the coast was, "an invalid wife." I'll never forget how he looked me over. He did everything that a horse buyer does, except to open my mouth and examine my teeth.

It was necessary for me to make three student trips to acquaint myself with Southern Pacific Standard Service. I learned that each car had a big book explaining this service, which we were to refer to when necessary.

I was given my credentials and introduced to the steward with whom I was to make my first trip. He was a swell fellow, with experience of the Northern Pacific's *Big Potato*. The entire crew spent all the forenoon, and up to leaving time, at the commissary stocking the car. We started serving dinner out of Los Angeles.

I explained to the steward that I knew absolutely nothing about hotel business, or dining-cars either. He served both dinner that night and breakfast next morning, but I was observing his every move. I watched how he seated the guests, where he carried his pencils, his attention to the people, how he kept the glasses filled and how he made change for the waiters. At luncheon I ventured to serve. He stood back and watched me for some minutes, then left the car and didn't return until the meal was "off." During our own lunch he looked at me and inquired, "What was your idea in telling me you had no experience? What are you doing, flagging?" Again I told him the truth; only this time I gave him the whole story.

That evening I served dinner alone. Again he left the car. But in the middle of the dinner, I received a message to get off the train at Deming, New Mexico, and work another train west to Los Angeles. Before I left the dining car, the steward told me not to worry, that he would turn in a good report about my service.

However, regardless of his encouragement, I realized that I didn't know the difference between a hunk of liver and a T-bone steak; that I would have menus to get up, as well as many other things that don't come under the regular category of a boomer rail.

That night when I presented my credentials for a berth on the Pullman, the long angle-worm of a conductor began yelping, "What, another? What's that dining car outfit think—that we're running these Pullmans just for their benefit?" His name was Doty. Afterwards, we got real well acquainted, especially one warm evening in Juarez, Mexico, when Pancho Villa was running that smelly burg.

One evening on my layover in El Paso, I met Doty with a couple other Pullman

conductors. They were just about filled up to the esophagus, when someone got the brilliant idea to go over to Juarez. Our first stop over there was the Black Cat Cafe, a nice place, run by two Americans. We soaked up several drinks and wore out one of the entertainers singing "Peg O' My Heart," before we decided to do a little gambling in Villa's Keno joint.

THIS DOTY was tall, I mean real tall, but the Mexican guard at the entrance of the cafe was an ax handle taller than Doty. Through my bleary eyes this guard reminded me of one of the giant trees in Sequoia Park, only with less expression. Being a soldier, he wore all his war paraphernalia, which consisted of a double belt of cartridges. When we rescued Doty, he was looking up into the Mexican's face, jabbering something that no one could understand, stealing cartridges from the guard's belt.

There was more woe in the Keno joint. For no good reason we won a couple times in there, but got out with our scalps intact. Our next stop was the Tivoli Cafe. This place was chuck full of Mexicans dancing and ki-yi-ing, booze, guitar music, soldiers and smoke. We had hardly got inside when the long drink of water had snared himself a senorita and they staggered into the crowd.

His dancing was pitiful. The only thing that held him upright was the thickly populated dance floor. Being a head taller than any one else, he was easy to see in the crowd and we watched and waited for something to happen. It did. A guy like Doty has a long way to fall. Somehow, he began staggering backwards and finally made it, right on the edge of a table in a booth. Things might have been all right if that booth hadn't been occupied by three Mexican generals, who were wearing enough brass and gold braid to sink a battleship. When the beer splashed all over their uniforms, they were three mad bulls and ready to do murder. One of them yelled, *"Catire, Gringo! Sabido es casus belli."* One of the bozos grabbed poor Doty and we were surrounded by the mob. None of us could speak Mexican, and it looked as though we were to be led to the firing squad, until the proprietor bounced into the scene.

After he found out who we were, he began tossing Spanish at those three in bucketfuls. Out of the corner of his mouth he told us to scram; and brother, we were across that International Bridge without taking a breath. Later, we learned that the proprietor of the place was Fred H. Mayen, and that he had a brother working for the Pullman people in the United States.

Out of Deming that night Doty told me that a dining car inspector was on the train. At the time this information didn't register with me. But after retiring I gave it a lot of consideration. The next morning at 5:30 I met Mr. Hansen, the steward on the train. He had just ordered his coffee and rolls, so I joined him. As I gave him my x-ray once over, I thought him a trifle uppish and decidedly nervous. He confirmed my idea of his nervousness when I informed him that Mr. Sted, the inspector, was on the train, for he jumped up from the table and said, "What? That so-and-so on the train?" When I nodded, he said, "Well, I'm glad you're here. You can fight with him into Los Angeles."

This talk of Hansen's about the inspector wasn't exactly soothing to my worries, either. In fact, I was about to go up to the smoker and pay my car fare to the next station, when Hansen called my attention to the guests who had just entered the car. I seated them. After that I had a change of heart about leaving the service, and decided to die with my boots on. I had never met Mr. Sted, but I was sure that he would need only one look at me to know that I was phony. I realized one thing—it wouldn't be necessary to say anything to the colored help about service. From the moment they learned that he was on the train, those boys got busy dusting, polishing silver, really on their toes.

When he did come in, something told me that he was Mr. Sted, and I had sense enough to seat him at the end of the car

The conductor was hopping mad about the dancing in the dining-car

where he could get an unobstructed view of the arena.

Nothing important happened. Later I was introduced to him, but he never spoke to me again while he was on the car. Then at Yuma, during the time we were serving lunch, he left the train. Although his leaving the train was a great relief to the crew, I still had my worries. However, they were needless. On my arrival my bond was arranged and I became a full-fledged dining-car steward.

The morning of my first run found myself and crew at the commissary, stocking the car. About thirty minutes before leaving time, a switch engine grabbed us and shoved us to our train under the station shed. Peeking out of the rear door, I spied Jack Hardy on the foot-board of the engine. He and I had worked together on several jobs and when I opened the door and said, "Treat 'er gentle, Bub; she's full of eggs," he took a gander at my blue uniform and brass buttons, then in his amazement nearly fell off the foot board. You can imagine what he said. Uncle Sam doesn't permit it in print.

As the train pulled out from under the shed, I was still jittery, but I was sure of one thing. Mr. Sted wouldn't bother me.

The car soon began filling up with dinner guests. I seemed to be doing splendidly, my nerves were getting back to normal, when who should walk in but Mr. Sted. I'm sure I would have jumped off the train if it hadn't been going so fast. But right about then business picked up in my kitchen. The second chef, while chopping salad with a couple of French knives, cut off a finger.

I turned him over to the agent in Pomona, where he was given first aid and then hospitalized. That night, after Mr. Sted had retired, I found a colored fellow at Yuma leaning against the corner of the depot, kinda proppin' the thing up in the moonlight. He wanted to get to El Paso, so the next morning found him in the kitchen as a dishwasher, and Mr. Sted approved the move.

Another dinner. With the car filled, except one seat, who should walk in but the trainmaster that I had invited the waitress at Indio to conk with the catsup bottle. He smelled as though his last drink had hardly got settled. Later, with the tables filled with guests, he was trying to balance a tenderloin between his knife and fork, bellering at the same time, "Steward! steward! Come here!"

Every one in the car watched as I approached the man. "I want to know if this is a standard steak on Southern Pacific diners?" he demanded. I explained that if there was anything wrong, I'd have the waiter remove his order and have it replaced with another cooked to his satisfaction. Then he roared out, "Not long ago I had to report a steward on the Shasta Route. Now I think I'll have to do the same here."

Casting my dignity out of the window, I told him, "Listen, you lousy drunken pup, one more peep out of you and I'll throw you off the train. I shall turn you in to the general manager for starting a drunken disturbance on a dining-car." Then I oredered him out of the car without giving him a chance to finish the meal. Of course I didn't turn him in; but a short time afterwards, Rule G dropped its net over him and he was discharged.

How to buy better work clothes

GET long wear from the tough materials and rugged sewing that go into Blue Bell work clothes. Blue Bell dungarees are cut full so they don't bind. They're Sanforized, and keep their roomy, comfortable fit as long as you wear them. Reinforced with no-scratch copper rivets. Plenty of pockets.

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BLUE BELL, Inc., Empire State Bldg., New York 1
WORLD'S LARGEST PRODUCER OF WORK CLOTHES

This same man was seated on a stool in the old lunch counter in Colton, when one of the local crew rushed in for a bite. John Quinlan, a long tall drink of water, brakeman first class but chuck full of antics, crawled up on the stool next to this trainmaster, who had a hangover. Somewhere during the shuffle, Quinlan had snared a little garter snake and placed it in his derby hat on top of his head. When the TM turned his head to see who was sitting beside him his jaw dropped, and his bleary eyes nearly popped out of his head. He let out a "My Gawd!" then rushed out of the place. Quinlan had cut a hole in his hat for ventilation, and the snake had his head sticking out and his tongue darting. It was just too awful for the drunken trainmaster.

Coming west one evening we were serving dinner just as we arrived at El Paso. On such occasions, people on the train preferred the dining-rooms of the station to the stuffy dining-car. While standing on the platform, getting some much needed fresh air, I observed the orchestra from the Black Cat Cafe in Juarez, Mexico, boarding our train.

Later, I got the idea that the people on the train would enjoy some good music and possibly a little dancing. I found that the people were all enthused over the idea. The orchestra was willing, and we stacked the tables, removed the rugs and placed the chairs against the walls. My help started a black jack game for themselves, and what I imagine was the first real dance in a Southern Pacific dining-car got under way.

Soon the dancers wanted something to drink, requesting that I open the bar. But we were rolling along at the time through an Indian reservation, which made it illegal for me to sell liquor. However, it wasn't long until my little bar was doing a nice business, until the train conductor discovered what was going on. He was simply shocked at the idea of dancing on the train and was threatening me with life imprisonment, or worse, if I didn't close my bar immediately. The second time he came back with threats of setting the car out at the next station, one of the dancers took over. He had told me that he was from Washington, D.C., on his way to Pasadena, that he was a senator, or something. Anyhow, he looked the part.

He told the conductor to lay off, that he had bought the liquor before we entered the dry zone and I was simply assisting him in entertaining his friends. He also promised to report the conductor for his language to me when he arrived in Pasadena.

The passengers were profuse in their praise of my dancing party and thought the company should have it as a regular service. In later years, the company had regular cars for dancing on certain trains. But if they had known about that dance that I gave back in 1913, my name would have been scrubbed off their payroll right then. But they waited to do that until a few months later.

On one run we lay over at San Antonio from 8:45 Saturday evening until Sunday night at the same hour. It was customary to get a few supplies there—milk, butter and bread. But the young man in charge of the commissary compelled the crews to stay in that car all day Sunday just so he could eat his dinner on the car. He could have eaten in the dining-room in the Union Station for free, but he was *boss*.

This particular Sunday, there was some colored celebration going on in San Antonio and my crew wanted the day to enjoy the festivities. I told 'em to go to it. They got their supplies Saturday night. After they left, I locked up the car, then went to the hotel. Sunday evening at 7:45 we were all at the car. So was the young man from the commissary, in full head dress, feathers and war paint. While I was unlocking the car, he was asking questions. Finally he said, "I've got a good notion to take you off the car right here." Think of it, and me under a five thousand dollar bond for that car! I lost my temper when I told him, "Get off this car right now, or I'll knock you off." He did get off, but my crew and I got off the same car when we arrived in Los Angeles. We were requested to resign.

"Have that brakeman's eyes examined before he makes another trip!"

JOE EASLEY

Gulf, Mobile & Ohio

Diesel Locomotives

Numbers	Drivers	Horsepower	Engine Weight	Tractive Effort	Builder & Date
			Switcher Type		
10–24	40	1000	231,067	57,767	Alco, 1944-1945
661–664	40	660	198,180	49,545	Alco, 1940
1001–1012	40	1000	230,000	57,500	Alco, 1941-1946
			Road Switcher Type		
50–54	40	1000	243,000	60,750	Alco, 1945
55	40	1000	247,500	61,875	Alco, 1945
56–59	40	1000	243,000	60,750	Alco, 1945
1102–1112	40	1000	247,500	61,875	Alco, 1944-1946
1113 1117	40	1000	243,000	60,750	Alco, 1947
1120–1127	40	1000	243,000	60,750	Alco, 1948-1949
1501 1508	40	1500	237,000	59,250	Alco, 1948-1949
1509	40	1500	243,200	60,800	Alco, 1949
1510–1514	40	1500	237,000	59,250	Alco, 1949
1515–1518	40	1600	243,380	60,845	Alco, 1950
			"A" Passenger Type		
100	36	2000	209,234	52,308	EMD, 1946
100A	36	1800	206,200	51,550	EMD, 1937
101–103A	36	2000	209,234	52,308	EMD, 1945
270–271	40	2000	231,400	57,850	Alco, 1940
272	40	2000	234,400	58,600	Alco, 1943
280–281	40	2000	253,750	63,437	Baldwin, 1946-1947
290–292	40	2000	202,600	50,650	Alco, 1947
1200	36	1800	268,100	67,025	EMD, 1935
			"A" Freight-Passenger Type		
880A–885A	40	1500	236,618	59,154	EMD, 1946-1947
B80–B82	40	1500	238,207	59,551	EMD, 1947
			"A" Freight Type		
700–754	40	1500	232,000	58,000	Alco, 1946-1947
800A 811A	40	1500	226,351	56,587	EMD, 1946-1947
811B–813A	40	1500	231,200	57,800	EMD, 1949
1900	42	1500	240,000	60,000	Ingalls, 1946
			"B" Freight Type		
B1–B25	40	1500	228,100	57,025	Alco, 1946-1947
B26–B29	40	1500	225,000	56,250	Alco, 1949
B30–B33	40	1600	240,000	60,000	Alco, 1950
B60–B64	40	1500	240,520	60,130	EMD, 1947
B65	40	1500	244,450	61,112	EMD, 1949
B66-B74	40	1500	232,000	58,000	EMD, 1949-1950

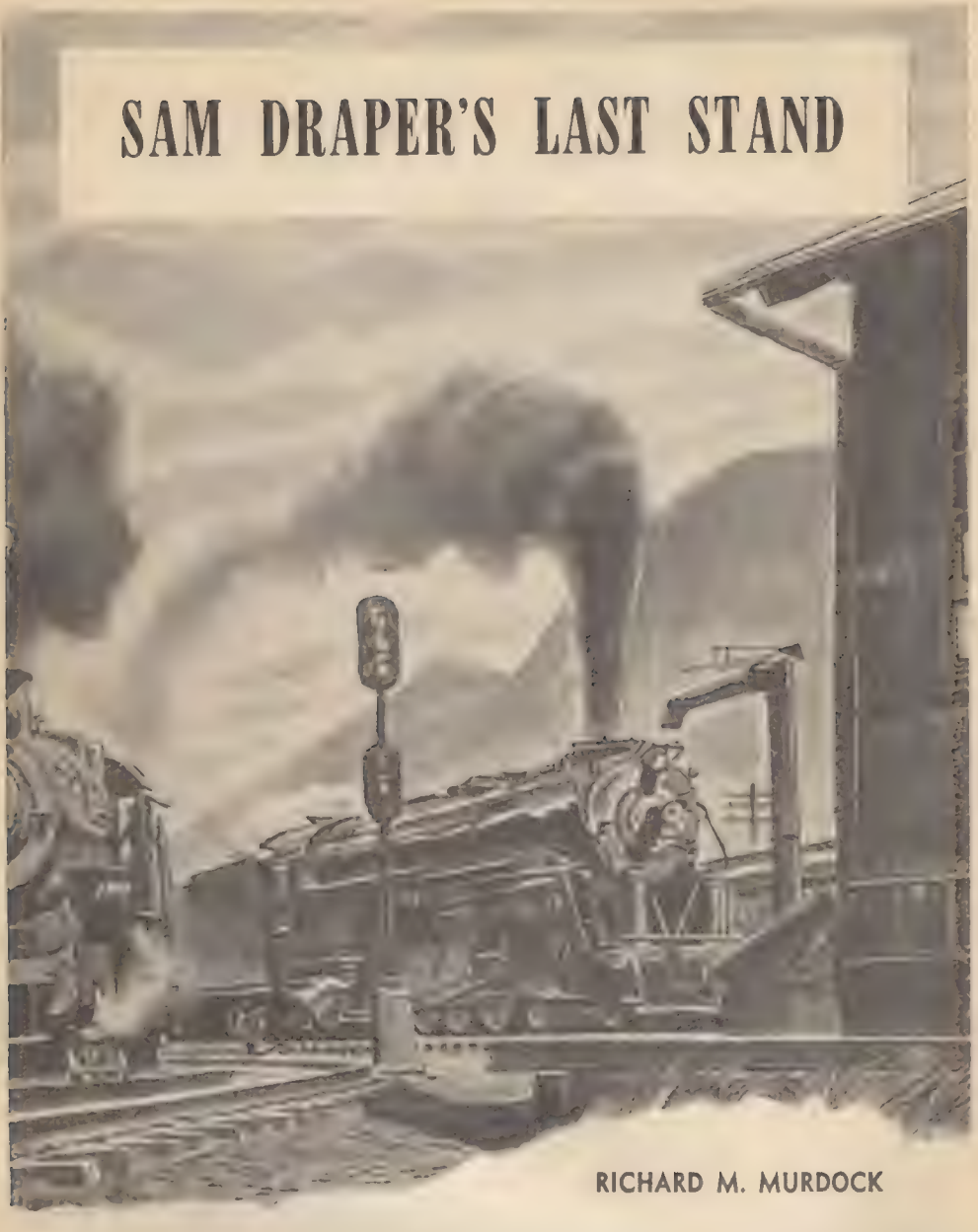
GM&O leans heavily on Alco and EMD for freight hauls. Engines 725, 727 and 701, Alco-built in 1946 and '47, are three of 55 in service

L. E. Griffith

Three blocks back of Chicago's Union Station a big GM&O passenger growler is readied for her St. Louis run, while a 4-unit freighter stands by for the next time-freight

Fresh from Schenectady, a blunt-nosed Alco freight unit poses for the camera

SAM DRAPER'S LAST STAND



RICHARD M. MURDOCK

WEARILY, Sam Draper sat down in the familiar old oak swivel chair, leaned back and put his feet upon the desk, crossing his long thin legs. The trainmaster's office at Valdina Junction looked the same to Sam as it had ten years before. He doubted if it had even been painted since he'd left. Outside of a few pictures of the Sierra Western's crack passenger trains, a standard clock and a big railroad calendar, the dingy yellow walls were bare. The small office still had two desks and chairs, a bench and a filing cabinet. A decade ago, Sam was the terminal trainmaster at Valdina Junction, and on the way up.

Sam pushed his bony fingers through

When Sam read the anti-overtime order he wished he hadn't taken the promotion

his thin, graying hair and eyed miserably the morning mail on his desk. Ironically, he thought back to a certain morning ten years before when he had tackled the mail with enthusiasm on his first morning as an official. He'd been out to make a name for himself.

But it hadn't turned out that way. Sam had been a switchman too long, and had tried to remain "one of the fellows" while holding an official job, which wasn't exactly what the company expected of an official. He'd managed to retain his popularity among his former footboard buddies, but he'd never gone higher than trainmaster and had spent ten years being pushed all over the division in that capacity. And

here he was, back at Valdina Junction, holding the job usually assigned to spent trainmasters.

The door burst open and Smiley Jackson, the trainmaster's clerk for the past thirty years, entered the little office he shared with his superior. Waddling toward Sam's desk with a fleshy hand outstretched, Smiley said warmly, "Glad to see you, Sam. It's been a long time."

"Hello, Smiley. Yes, it has. You're looking fine."

"You too, Sam. Things are about the same around here. A few new switchmen in the yard, but still plenty of the old gang left."

After a few words about the old days Smiley went to his desk and started lining up the day's work. Sam lazily picked up the mail and fingered through it. A sealed envelope from the superintendent's office caught his eye. He picked up the letter opener and neatly slit the envelope. Slowly he read the contents, laid the letter down and mumbled, "So that's it. Now I see."

"Did you say something, Sam?" asked Smiley cheerfully.

"It's this letter. Say, Smiley, who's on the 3 o'clock afternoon job that switches the oil refinery at Kent City?"

"Chuck Denning's the foreman. Browny Caruthers and Bill Linden are helping him. Tod Smith's the hogger and young Jim Brian's the fireman. Lot's of seniority on that job. They double through nearly every night."

"I see. Just the same as before. This letter's from the superintendent, instructing me to cut out all overtime in the Valdina Junction Yard immediately."

Smiley shook his head sympathetically, causing the mass of uncombed, curly gray hair to bobble on his forehead. "That's been tried before, but never successfully. To keep the oil plant at Kent City satisfied with jobs working out of here—that spells overtime and it always has. Nobody's ever been able to change it. Most of the jobs make some overtime, the same as when you were here before."

Sam stood up slowly, his slim six-foot frame rising to a slightly stooped erectness. He sauntered to the dirty window and glanced toward the roundhouse, where the morning engines were lined up on the get-away, some of them smoking, some gasing. Lines of weariness showed on Sam's thin, sharp face as he fully realized what the superintendent's order meant. Dissension among the men and unpopularity for him, the one thing he'd fought against ever since accepting an official position. He wished now that he had refused the promotion, and remained a switchman. He shouldn't have proved himself such an expert with a switch list, or gathered so much knowledge regarding the operation of Valdina Junction Yard, the very reasons for his advancement. How could a man possibly maintain the respect of his former co-workers and still enforce an order that would take money from their pockets?

The trainmaster walked slowly back to his desk, sat down and gazed at the remaining pile of unopened mail. Finally he reached for the phone and called the Consolidated Oil Company in Kent City. "Hello, Mr. Hargraves? Sam Draper, the new trainmaster at Valdina Junction. I called to check on the service in your plant. How are the boys doing?"

"Glad you called, Draper," answered the tough little oil chief. "We're receiving the best service in years. I'd heard about the change in personnel over there. I hope it doesn't mean changing any of the jobs that serve us. Seems like every time a new trainmaster is appointed, a job or two is changed and the plant is forever getting back to normal. I'm not trying to tell you how to run your railroad. I just want good service. Let's keep things rolling as they are."

"Orders from the superintendent make some sort of a change imperative, but I'll do everything in my power to see that Sierra Western's service to you is not in any way disrupted," Sam said as a sickly feeling crept into the pit of his stomach.

"Good," boomed Hargraves. "It looks like a big year for us, Draper. Largest asphalt orders in our history, and there's

plenty of lube oil moving, to say nothing of gasoline and light oil specialties. The shipping department is snowed under and things are just getting under way. Orders are still pouring in. It's damned important to keep things moving as they have been."

"All right, Hargraves. I'll do my best."

After Sam hung up, he sat thinking, wondering just how to go about cutting the overtime. The logical step would be to put on a job to do the work that caused the overtime, although the very construction of the yard favored the overtime factor. The way it was cut into the base of a series of steep hills rising from the bay, resulting in a yard twelve miles long and never more than eight tracks wide, made any switching movement awkward. The yard tracks were scattered, a few here and a few there on either side of the east and westbound main lines and wherever the very limited space permitted. And the way Valdina Junction rested in a little valley in the middle of the yard, away from the actual work, made service to the surrounding industries difficult, especially the huge oil refinery at Kent City, six miles away. Switch engines were always dodging first class trains and helping through freights over the hill at the east end, to say nothing of having to make up the many locals. It was a wonder more overtime wasn't made, and a downright miracle that they had ever been able to satisfy the oil company.

Sam emerged from his spell and interrupted Smiley, who was typing. "When you finish that report, I want to dictate two bulletins for you to post."

"Coming right up, Sam."

"I've always thought, Smiley," confided Sam, "that it was possible to be a good official and still be liked by the men who do the work. The 'old man's' making it tough to prove that. Now, about those bulletins. Address the first one to all yardmasters. 'Effective immediately, yardmasters will be held responsible for overtime made on any job. Engines must tie up on time.'"

"The second one will read, 'Effective June 6th, job number 80 is established to work from 11:30 to 7:30 a.m. daily. Start and relieve at Valdina Junction roundhouse.'"

"The new job, Smiley, is to do the work that Chuck Denning's crew has been doing on overtime. Chuck's gang must get to the barn on time tonight."

"Pardon me, Sam, but Chuck and his helpers, including the engine crew, will probably get off the job if the overtime's cut out. All those rails can hold good daylight switchers. There's lots of seniority on that job. And the oil refinery, being on a hill like it is, is a tricky place to pull and spot. If a guy doesn't know the work—"

"Any switchman can do that work. A switchman's a switchman," cut in Sam bluntly, knowing that Smiley's words were only too true. "Post the bulletins as soon as you're finished with them."

"Okay, Sam," Smiley replied softly.

CHUCK DENNING, the lanky, loose-jointed foreman on the big pay afternoon refinery switcher, entered the change room just before reporting for work. Chuck was in his early fifties and had over thirty years with the Sierra Western.

"Hey, Chuck," drawled big slow-moving Browny Caruthers. "Get a load of this bulletin. No more overtime! Sam Draper's put on another job to finish spotting the plant after midnight. Our job has to tie up on time!"

"The hell you say!" answered Chuck as he rambled to the bulletin board and studied the orders.

Short, wiry, middle-aged Bill Linden, Chuck's other helper, came in, got the gist of the excitement and pranced up to get a gander at the new bulletins. One glance, and he flatly announced, "Hell, I'm getting off the damned job. That don't sound like Sam Draper to pull a stunt like that."

"No, it doesn't," agreed Chuck, "but you can't tell what ten years of being an official might do to a guy."

"Yea, he's probably like all the rest of the brass by now. And here I was thinking things would be better with Sam back," said Bill.

"Sam used to be a swell egg. There wasn't a better man in the yard to work with. Remember when you and I were helping him on that daylight job eleven or twelve years ago, Bill?" asked Browny.

"Yea, and what a gravy train that was. Old Sam was tops then, but it looks like he's gone sad now. Can't understand him doing a thing like this, though. He used to grab all the overtime he could get."

"It's got me too," agreed Chuck. "Well, I'll work the job a couple of more days to make sure the big money is gone before I bump on a daylight job."

"I'm with you, Chuck," said Browny.

"I'll string along," mumbled Bill.

At ten o'clock that night, Johnny Clarkson, the Sierra Western's yardmaster at Kent City who was supervising the switching of the oil refinery, ordered Chuck Denning's crew to drop their work and head back over the main line to Valdina Junction and tie up, on time. They hadn't quite finished pulling all of the loads from the plant.

Shortly after twelve midnight, new job Number 80, with an extra engine and yard crew, arrived at the refinery to carry on the work. By morning, the green crew had the rest of the plant pulled, but only half of the empties spotted, when they were ordered to return to Valdina Junction and tie up. They had to wait in the clear for the early morning parade of passenger trains to go. The delay netted the crew thirty minutes overtime and had the yardmaster pulling his hair.

The daylight Kent City switcher came on duty at Valdina Junction at 7:30 a.m., picked up 34 empties destined for the refinery, went to Kent City, put the cars on the storage track, and reported to a frantic yardmaster at 9:00 a.m. The crew was immediately ordered to finish spotting the plant, as there were many oil company workers waiting for cars to load. Ordinarily, Chuck had the work done by 6:00 a.m. The new deal was not functioning properly.

The plant was finally spotted at 11:00 a.m., just five hours late. Hargraves called Sam Draper, demanding an explanation. Sam assured him things would be better that night.

But they weren't. Instead, they grew steadily worse. Each day and night the plant slipped farther behind. Less work was done and the greenhorns on the new night job continuously mis-spotted cars, causing serious delays to rush orders. Phone calls from Hargraves to Draper became frequent. Soon the Consolidated Oil Company refinery at Kent City was 24 hours behind in its shipments. The situation was hourly growing worse. Oil company men were loafing much of the time waiting for cars to load. The yardmasters were catching hell from Sam Draper, and Draper was taking a beating from the ruthless, lashing tongue of Hargraves.

And then like a fire following an earthquake, Chuck Denning, Browny Caruthers and Bill Linden, the one crew Draper was relying upon to help straighten things out, vacated the afternoon job in favor of a daylight job that didn't switch in the refinery. In one crushing blow all the experienced men were gone. The greenhorn switchmen ruled and the plant fell farther behind. Hargraves, in desperation, bluntly informed terminal trainmaster Draper that unless the situation was remedied immediately, he was going directly to the general manager. Sam knew what that meant, so he rashly, feverishly promised Hargraves immediate improvement.

Sam called Chuck Denning and his helpers to the office after their first day shift. The three switchmen sat on the bench opposite Sam's desk. After shaking hands with his old friend, Sam came quickly to the point. "I'm sorry you fellows vacated the afternoon job," he began. "The oil company is very satisfied with the way you handle things over there. Of course, this recent change has put the plant behind, and I was wondering, for old times' sake, if you fellows would consider going back on the job as a favor to me. Without a doubt, you're the best qualified men to switch the refinery."

"Under the old setup, Sam, I'd be glad to," spoke up Chuck. "The only incentive

"I'm asking you to help out for old times' sake—how about it?"

that kept us on the job was the overtime. Put it back like it was, and I'll be back on the job tomorrow afternoon."

"Sorry, Chuck, but that's impossible."

"Why? You just said we've been satisfying the oil company. There was no kick from anyone until you took Ramar's place and ordered the overtime stopped. Isn't it worth it to the company to pay a little overtime and have one of their best customers satisfied?"

"It seems not. I have orders from the old man himself to cut out the overtime. I may have to put on another job or two to do it, but it still looks better on the books, and that's what the company wants. As you know, it hasn't worked too well so far. You boys know that work, so I'm asking you to help out and go back on your old job. Hargraves can't stand much more. Now, how about it?"

"Sorry, Sam, not me," said Bill Linden honestly. "Things are too messed up and there's no money in it. It was hard enough to sacrifice home life with the wife and kids by doubling through every night, but for one shift at straight time, no thanks. I'll work days."

"No, if it can't be like before, I'll pull my seniority," said Chuck. "Sorry, Sam.

I'll just have to work in the daytime."

"I'll take days if I can't make a little extra," followed up Browny.

After an uncomfortable pause, Sam said, "Well, if that's the way it is, boys, I guess that's all. Thanks anyway." Disappointment pushed its way to the surface. Had he lost out with the very men he'd worked with for so many years? He knew he couldn't blame them.

The men filed from the room. Outside, Chuck said, "I guess Sam's still okay. Just in a tough spot, that's all. But that's going a little too far, trying to get us back on the job to clean up the mess he made by cutting out the overtime."

Chuck and Browny silently nodded agreement.

SAM'S NEXT move came quickly and out of sheer desperation. The next day there were two new jobs bulletined; an afternoon and a midnight job. Both were to go to Kent City and help out in the refinery. Speculation varied among the men as to the probable success of Sam's move. Unfortunately, things were too far behind for the new jobs, with greenhorns from the extra board, to do much good. They pitched pluckily into the mess, though, but without noticeable results. Outgoing cars, some of them rush orders, were mixed with incoming cars, and all of the tracks in and out of the plant were jammed to capacity. There was little room to work, and the engines got in each other's way. Inaccurate yard checks and poor switch lists added to the turmoil. It looked as though Sam, as an official, had met his Waterloo. And to top it all, there came a phone call from the irate Hargraves.

"Sam, this will never do," he bellowed, "something has got to be done! I'm going over your head, like I should have done a week ago. I'll get hold of the president of the damned railroad if that's what it takes to get things moving around here. We've got to have better service!"

"Listen Hargraves, give the new crews a chance. They'll be catching on to the work soon, and things will be moving much faster."

"I'm tired of your promises. They've got to be one hell of a lot better in damned short order or I'm going over your head—do you hear? This is final. If the plant isn't close to normal by tomorrow night, I'm going to deal directly with the superintendent!"

Sam hung up. Slowly he put his feet up on the desk and glanced over at Smiley, who had resumed typing at the close of the phone conversation.

As Sam studied the fat little man who had been content in his meager capacity for thirty years, he sincerely wished he had done likewise and remained a switchman.

The overtime was gone all right, but there was still the problem of getting the plant caught up. The only solution would be to somehow get the men like Chuck Denning who knew the refinery, back on the jobs immediately. But how? And suppose a way was found to get the key men back on the jobs, there was still the problem of loss of time as crews dodged first-class trains and spent precious minutes, sometimes even hours, going back and forth between Valdina Junction and Kent City. How could that be eliminated? The only way was by starting the jobs to work *right at the refinery*—and why not? God, why hadn't he thought of that before? Kent City was within the Valdina Junction yard limits and there was nothing in the brotherhood agreements preventing jobs from being tied up anywhere within yard limits as long as it was a designated spot with change-room facilities for the men. The old lcl. station just outside the refinery would be the logical spot, of course.

But if three jobs, one around the clock, were established at Kent City, would the old heads who know the refinery work take them? Most certainly. Nearly all the experienced men lived in Kent City. The convenience alone would attract most of them. Not to have to drive the curving twelve-mile round trip to Valdina Junction every day would surely be an incentive. It was certainly worth a try. And it should do the trick.

But wait. How to service the engine working in the refinery? Let's see. A full tank of oil would last 24 hours easily. And there was that water spout right at the refinery. Chuck's old job could bring a fresh engine over every afternoon from Valdina Junction and trade with the afternoon refinery job. Yes, that would work fine. And the old house track next to the lcl. station would be an ideal place to leave the engine while shifts changed.

Sam kept going over his new scheme, searching for hidden flaws. After a thorough check, it seemed feasible, with a promise of solving everything. Sam decided to give it a try.

"Smiley," Sam interrupted, "I want to dictate a couple of new bulletins." The trainmaster rose from his desk and walked briskly around the room, deep in thought as Smiley adjusted papers in the typewriter. An inquiring glance from Smiley's round face indicated he was ready.

"Effective June 18th," Sam began, "job number 84, 7:30 a.m. to 3:30 p.m., job number 85, 3:30 p.m. to 11:30 p.m., and job number 86, 11:30 p.m. to 7:30 a.m., will be established to work daily, start and relieve at the LCL station at Kent City."

"Did I get you right, Sam. Did you say the lcl. at Kent City?"

"That's right. Also, post bulletins abolishing the three jobs that were put on to cut out the overtime."

Three days later came a phone call from Hargraves. "Hello, Draper? Hargraves speaking. Well, things are shaping up nicely. We're nearly back to normal, and in good time. I'll have to hand it to you—that was some idea, putting the jobs to work right here at the plant."

"Thanks, Hargraves. Glad things are better," answered Sam cheerfully.

"Certainly raised havoc for a while. Say, they aren't figuring on changing trainmasters again in the near future, are they?"

"No, Hargraves, I don't think so. I'm sure everyone will be satisfied now. Even the men I used to work with."

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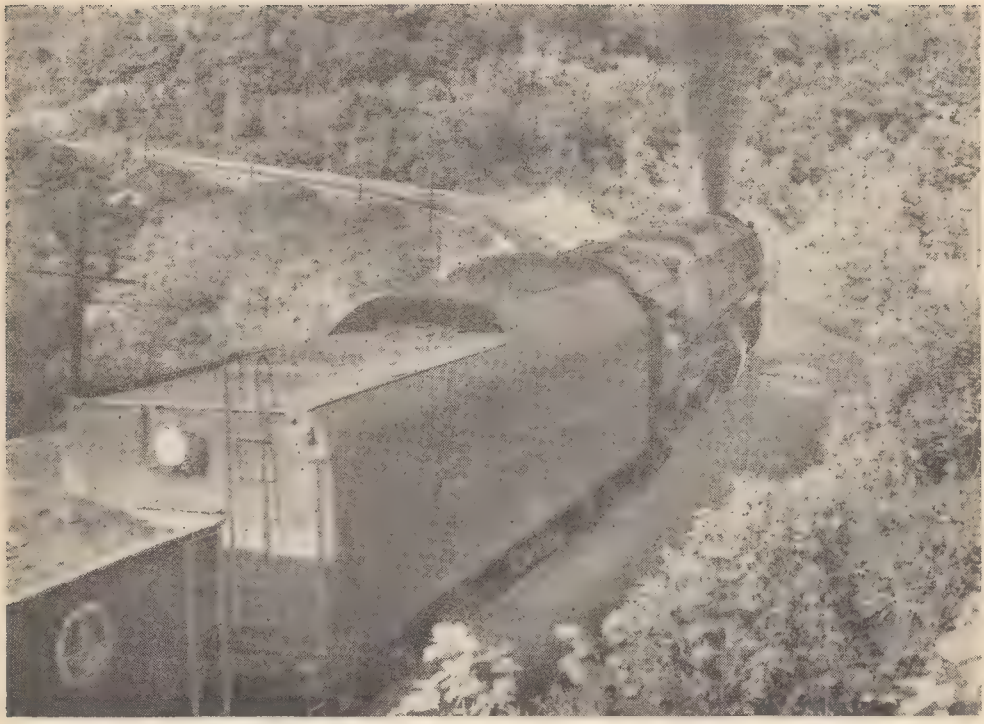


ON THE SPOT

Our Readers Talk It Over With the Editorial Crew

FOR THOSE who want to know the story behind *Railroad Magazine's* cover this month, by Henry B. Comstock, here is the artist's own version.

"As an old *Camelback* enthusiast I have always admired the Philadelphia & Reading's early efforts in that field of design. Those of you who have identified my initials under the various *Nutsplitter* plans appearing in past issues of the magazine will recall that one of my last sets of drawings covered the granddaddy of all *Camelbacks*. It was while I was working on this strictly mechanical interpretation of the 408 that I decided to put an 8-wheeled version of the swallow-tail on canvas.

"From the standpoint of technical accuracy the high-stepping 411 does not belong in the mythical Schuylkill Valley setting I have made for her. Actually, she should be streaking across the South Jersey flats. But to me, as to most of *Railroad's* readers, the Reading will always be an integral part of the rolling hills of Pennsylvania and, more particularly, of that industrious and bountiful valley of big red barns, four-square stone houses and mills, and gingerbread-taped stations.

"As for the people: if you have ever swung your heels from a baggage truck, I hope you'll recognize them all. Costumes change, but not the folk *Down by the Depot.*"

B&O's No. 7617 heads for the woods, or looks as if it is, while blasting coal tonnage over Cranberry Grade at Amblersburg, W. Va. Class EM-1 2-8-8-4 locomotives on the B&O are comparatively new, Baldwin outshopping them after World War II

B. F. Cutler, Rail Photo Service

FIVE B&O track foremen have just completed the most unusual job in their careers; they helped to build Liberia's first railroad in Equatorial Africa, a 43-mile line from rich iron ore deposits in the Bomi Hills to the seaport capital, Monrovia. The B&O loaned the king snipes to the Liberia Mining Company, Ltd. Track gangs of natives worked an 8-hour day seven days a week, each being given free noon-day meals of meat, rice and palm oil.

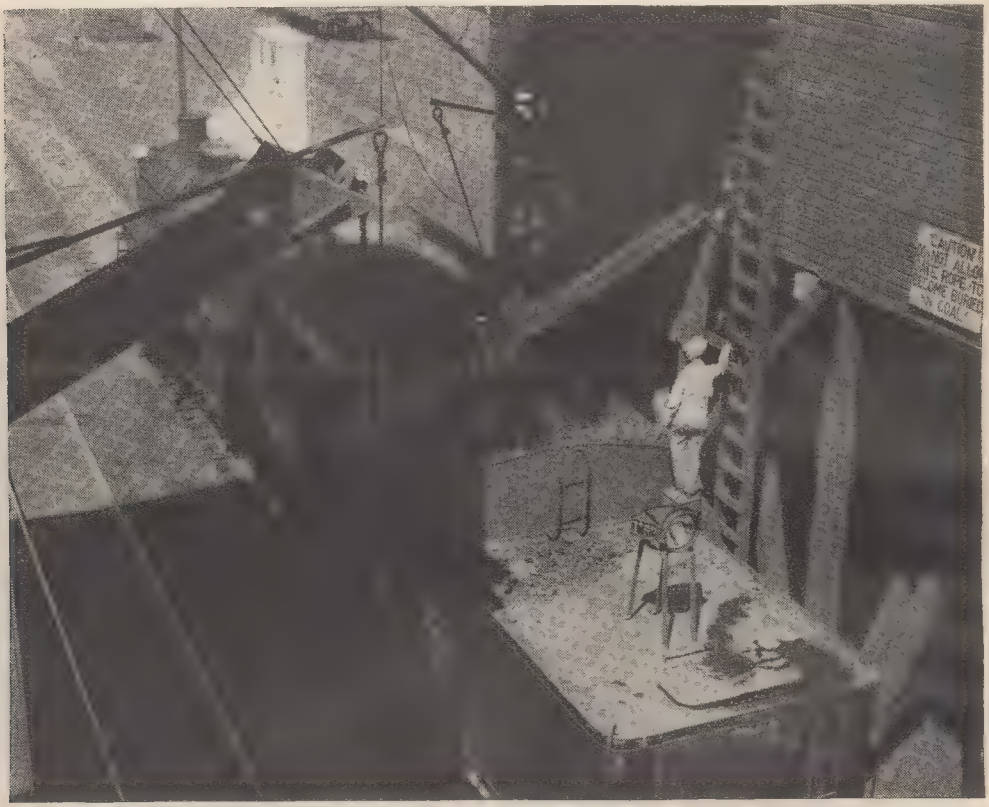
One man, Howard J. Young of North East, Md., is staying in Liberia as president of the road; the other four returned home by plane. Liberian mine ore is being shipped by rail and boat to Baltimore.

CAMELBACKS that used to run on the NYO&W near Walter Ryse's home at 717 West Sibley Avenue, Taylor, Pa., are recalled by him. He writes: "I vividly remember firemen spading the black diamonds at night, bathed in the firebox glow. Those engines were 2-8-0s used either as helpers or regular freight hogs. Often a series-450 *Mountain* type and a *Camelback* would haul the evening extra through my town. It was a grand sight. I, for one, would like to see steam as the main power for freight and passenger trains."

Another steamfan, Louis K. Penningroth of Larimore, Mo., who describes himself as a "sworn enemy of Diesels," says he liked *Railroad Magazine* in the days when it reflected the prevalence of steam

Water tank at Milbank, S.D. provided camera vantage point when Class L2 *Mikado* 638 stopped at Milwaukee Road coaling tower for fireman and helper

Don E. Wolter, Milwaukee Road Magazine



FIDDLETOWN & COPPEROPOLIS RY.

No. 39 A Broken Whistle Valve Disturbs the Orderly Routine of Life at Copperopolis

by Carl Fallberg

power, but now "it just isn't what it used to be."

Penningroth is mentioned in the book *Ambassador on Rails,* put out by Christian Publications, of Harrisburg, Pa., telling the life story of Uncle Dave Fant, the Southern's retired engineer-evangelist. Penningroth and Ray Twillman are building a ¾-inch scale model of a *Pacific* type passenger engine as a tribute to Fant, a job they undertook in 1935.

"I believe this is the first engine model with a religious background," Penningroth writes. "Uncle Dave and his wife were recent guests at my home. He is now 83. Not long ago I visited Casey Jones' widow at her Jackson, Tenn., home, had lunch with her, and took her for a drive. She showed me Casey's grave, the house in which they had been living at the time he was killed, and the church they were married in and from which he was buried.

"I also visited Casey's last fireman, Sim Webb, in Memphis. I've known him for years. He told me positively that the freight train Casey's engine crashed into had no flagman out to warn them."

Editor's Note: This point has long been argued in crew rooms, smoking cars and sand houses. The Illinois Central's official report on the wreck, exonerating Flagman Newberry and blaming Engineer Jones, includes testimony by Sim Webb to the effect that Newberry performed his duties adequately that night in 1900. After the Negro tallowpot quit railroading, however, he disavowed that "testimony" and maintains to this day that he gave it under pressure at the investigation. When Freeman Hubbard was writing his book, *Railroad Avenue,* Mrs. Jones told him that Newberry, now dead, asked her for data about Casey to use in a motion picture that would "make a million dollars"; but Mrs. Jones refused, saying: "If you had been at your post of duty the night of that wreck, my husband would be living today."

PANAMA RAILROAD CO. is now the Panama Canal Co., the change having been made to conform with a new law.

GASLIGHT ERA. We learn from Herman H. Diers of 4722 Chesapeake St., N. W., that the New Haven Railroad station at Wollaston, Mass., is still lit by gas. Maybe we have been overestimating the march of progress.

LOST & FOUND DEPT. A scared but friendly brown puppy, checked through from Winnipeg on a CNR passenger's ticket, showed up in Montreal's Central Station but his master did not. The dog was given the run of the depot, but rules say that animals left on trains must not be kept more than three days, so Pat Anulty, baggage agent, had the story placed in a Montreal paper in the hope of catching the eye of the dog's owner. Not one but half a dozen "owners" claimed the stray. The real owner finally saved the SPCA the task of finding a new home for the dog.

McKEEN CAR No. 5 of the Lakeside & Marblehead, mentioned in William Schopp's "Born Thirty Years Too Soon" was removed from the Weir Brothers junkyard in Sandusky, Ohio, to a place ten miles east of Toledo. There, according to C. C. Duncan of 1206 Edgewood Drive, Royal Oak, Mich., it has been placed on a concrete base, had a wooden wing added, has been wired for electricity, and now serves as a roadside restaurant on U. S. Route 2. The car is painted in its original maroon and bears L&M lettering. Its headlight and diver's helmet windows are still in place.

PINE CREEK GORGE (August, page 57) is located 12 miles west of Lock Haven, Pa., and 2 miles from Jersey Shore, Pa., reports Capt. Howard W. Herrmann of 2025 Kennedy Drive, Augusta, Ga., and is known as the "Grand Canyon of the East."

FLOYD J. MATTICE—contact Grant Hamilton of 4503 West End Avenue, Chicago 24, Ill. Hamilton writes: "Floyd's letter in *On the Spot* interested me because I started braking on the Lake Erie

Wayne P. Ellis, Rail Photo Service

Ready Reading. At Zoo Tower in Philly, Reading *Northern* 2127 receives orders

& Western in 1890 and made student trips with his father, Ed Mattice. Later I boomed around, working on the Illinois Central for 11 years and the Santa Fe for 31, and retired 5 years ago. I'd like to hear from Floyd."

CLAIMING a tax rebate of more than $12 million from New York City, the New York Central filed an appeal at Albany, N. Y.; but a court-appointed referee has decided against the railroad company. The Central's position is that the State Tax Commission over-assessed its right-of-way on Park Avenue between 133rd Street and Grand Central Terminal. That assessment for 26 years totaled $697,005,775. Most of the track-bearing land in question, roofed over, is used as a public highway.

JUVENILE DELINQUENT. Clarence Williams, 16, of East Chicago, Ill., says he "wanted to see some sparks fly." So he maneuvered two 140-pound rail sections onto the Pennsy track near West Gary, Ind., he admitted to police, and hid in the bushes to see what would happen. The *Broadway Limited,* speeding from Chicago to New York with 400 passengers, plowed into the obstructions but was not derailed. FBI men, police and railroad bulls traced the crime to Clarence and turned him over to juvenile court.

TOO REALISTIC. Film players making a technicolor movie, "The Denver & Rio Grande," were staging a fight scene near Durango, Colo., when flames spread across the track. Director Hasking called, "Cut!" and all the men in the cast, including the star, Edmond O'Brien, joined a Rio Grande train crew in fighting the fire. They halted the flames before it reached virgin timber.

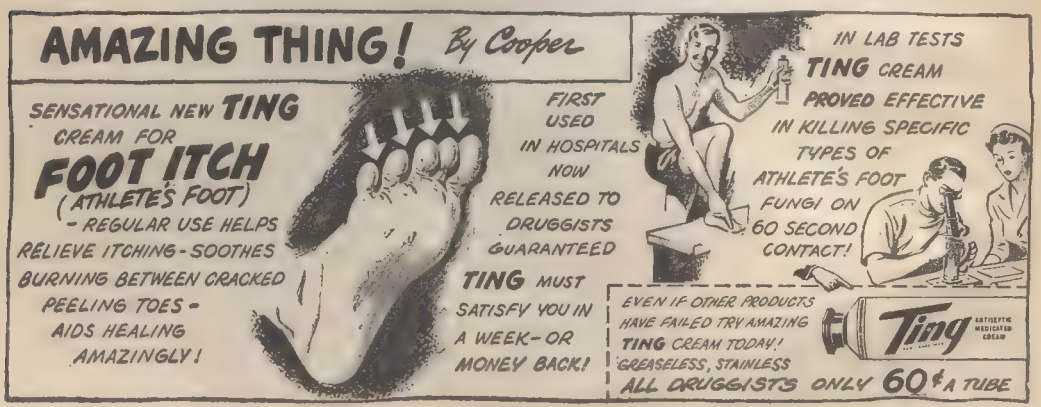
TOP SENORITY among the train conductors of America—that's the record claimed for Charles E. Knowlton, 81, who has been working continuously in Boston & Maine passenger service since July 1, 1889. Knowlton started as a brakeman on the old Eastern Division, Essex branch, in the era of link and pin, hand brakes and flying switches. Two months later he was punching tickets on trains out of Boston. The octogenarian lives in Danvers, Mass., has been a trainman more than 63 years; a qualified conductor more than 58, and never had a brownie on his record.

ANOTHER hard-to-beat record is that of locomotive 58865 on the British Railways, London Midland Region, which, after 93 years of sturdy service, made her graveyard run from London to Derby to be dismantled. As long ago as 1858 this little engine was the pride of Victorian London as she busied herself with passenger trains between Hammersmith and South Acton.

In those days she was North London Railway No. 37, but in 1872 they changed her looks, gave her two more wheels, a crane and the number 29. Thus equipped, she did chores at the London Midland's Bow works, pushing and shoving broken-down engines.

FREE RIDES on the *Shop Train Special* between West Davenport, Iowa, and Silvis, Ill., are given daily to 300 workers of the CRI&P's Silvis shops, says the *Rock Island News Digest.* This passenger train, operating since 1904, runs on a schedule as precise as that of any streamliner. The worker who isn't on time at one of the seven stopping points on its 12-mile run is usually late for his job.

This train picks up its first passenger in West Davenport each day about 6 a.m., stops at the Rock Island station in downtown Davenport at 6:10 for its biggest passenger load, and clicks right along, making five more stops on the Illinois side before reaching the shops at 6:42. And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ALL DRUGGISTS ONLY 60¢ A TUBE
Ting

R. B. Trexler

Recognize the scene? It's Southern Pacific's roundhouses at Roseville, Calif. ***Mallet*** roundhouse on right shelters AC cab-in-front power. Small roundhouse on left welcomes tinier engines, from 4-8-2s down to yard goats. Far side tracks lead to east yard, and road off to left is main line to hills

12 minutes after the 3:30 shop whistle blows quitting time the train starts on its return trip.

Free rides spare Silvis workers the strain of grinding their automobiles through traffic, saves them transportation money, and the morning trip is a pleasant transition between that bleary hour of awakening and the start of the day's toil. At night, on the way home, the train is a pretty good place to relax, smoke, talk about sports, women or politics, or play cards, or just view the river.

Skippered by Murray Thayer, an old-timer, the train consists of four coaches and a baggage car, with a crew of seven, including Baggageman Wally Wundquisi. Shopmen aren't the only passengers; anyone can ride for 15 cents. Many employes of industries along the Illinois side of the river use this unusual train.

WANNA BUY a railyard? You can pick one up—for a few million dollars. The Boston & Albany wants to sell a couple of Boston yards, totalling 28 acres, assessed at $8 million. Bulk of the work now done in those yards will be transferred to Allston, Mass. Money from the sale is needed to retire certain B&A bonds, thus reducing interest charges now borne by the New York Central.

TOOKY'S old-age record is unsurpassed in railcat circles, according to her owner, Conductor Elmer Jones, Illinois Central, Cherokee, Iowa. This cat died the other day at the advanced age of 20 years. Her longevity is credited to a diet mostly of hamburger and fish.

ROMANCE OF STEAM. "Was there ever a boy living near a railway line whose heart didn't beat faster when he heard the big engine coming up the grade," asks the *New York Times,* "maybe two engines if it was a lucky day? Up they came—flats, gondolas and boxcars—up the grade and over, gathering speed, swaying around the bend, shooting sparks as the brakes went on, shaking the ground, a god in greasy cap leaning out of the cab window, demigods running along the tops or perched in the Olympus of the caboose."

LAST westward run of the Chama-Dulce, N. M. passenger train of the Denver & Rio Grande Western was Conductor Stamy Edmisten's third *last run.* Previously he had handled the last westward *San Juan* and the last Pagosa Springs train.

DEATH came to a retired engineer the other day: Thomas Echols Landen, 90, the last living hogger who handled the *General,* the engine that figured in Andrews railroad raid of 1862 and which is now preserved as a museum piece in Chattanooga Union Station. Landen served the NC&StL for 53 years, mostly running between Atlanta and Chattanooga.

REMOTE CONTROL. No New York Central passenger train comes within 28 miles of D. C. Smith's office but the Central ticket agent at Fort Wayne, Ind. does a brisk business in selling passenger tickets. Last year he sold 1155 tickets worth $53,000.

Fort Wayne is at the southern end of a Toledo Division branch. The Central serves it for freight only, but folks from three General Electric plants make frequent trips to and from Schenectady, N. Y. They buy tickets from Smith at Fort Wayne and ride buses between that point and Waterloo, Ind., on the Central's main line, 28 miles north, where they board trains.

OVERDUE FLATCAR 33509 has finally come back to the Boston & Maine after 2¼ years on "foreign" lines. Countless messages had been sent to different roads, asking them to route the car home, but the flat had gone merrily on her way from one state to another. This car was in Joe Easley's *Along the Iron Pike* (July).

The length of time is not unusual. The rare angle is this: No. 33509 was the only one of 5200 B&M freight cars not returned to have the new, improved type

H. W. Pontin, Rail Photo Service

Brother to Engine 7617 (page 120), B&O No. 7603 nears top of mountain on last trip into Terra Alta, W. Va., crest of Cranberry Grade. This 2-8-8-4 had distinction of being No. 48 at Chicago World's Fair

airbrakes installed, as ordered by the ICC, with a deadline of January 1, 1952. However, the wanderer was finally caught in the Midwest and rushed home.

REMEMBER Frank Hughes, a CB&Q conductor? Edward H. DeGroot Jr. of 1309 Spring Road NW, Washington 10, D. C., tells a story about him. Many years ago a town south of Colchester, Ill., on the Burlington's Quincy branch, had a notorious saloon. Coal miners and young toughs used to go south on train 101, get drunk and take over northbound 104 on their return. Superintendent H. H. Hitchcock called in Hughes, then a young conductor, and said:

"Frank, I want you to run trains 101 and 104 for a while. The Colchester gang has been overawing the crew and refusing to pay fares. Break that up!"

Frank grinned. He was large and brawny. After laying a hickory pick-handle in the woodbox at the front end of the smoking-car on 104, he told the engineer and fireman that if the bellcord were pulled shortly after they left Colmar they should stop the train quickly and go back to the smoker prepared for trouble. The brakeman, also armed with a club, was to rush in from the rear of the car to help.

Entering the smoker, Frank said polite-

ly: "Fares, please, gentlemen!" Jeers and taunts arose. The brains set down his lantern and went down the aisle swinging his pick-handle left and right. Before the rest of the crew could get into action, the rowdies were cowering down between their seats to dodge the rain of blows. Frank laid aside his club and started again at the front end of the car, saying pleasantly: "Fares, please, gentlemen!" This time he collected.

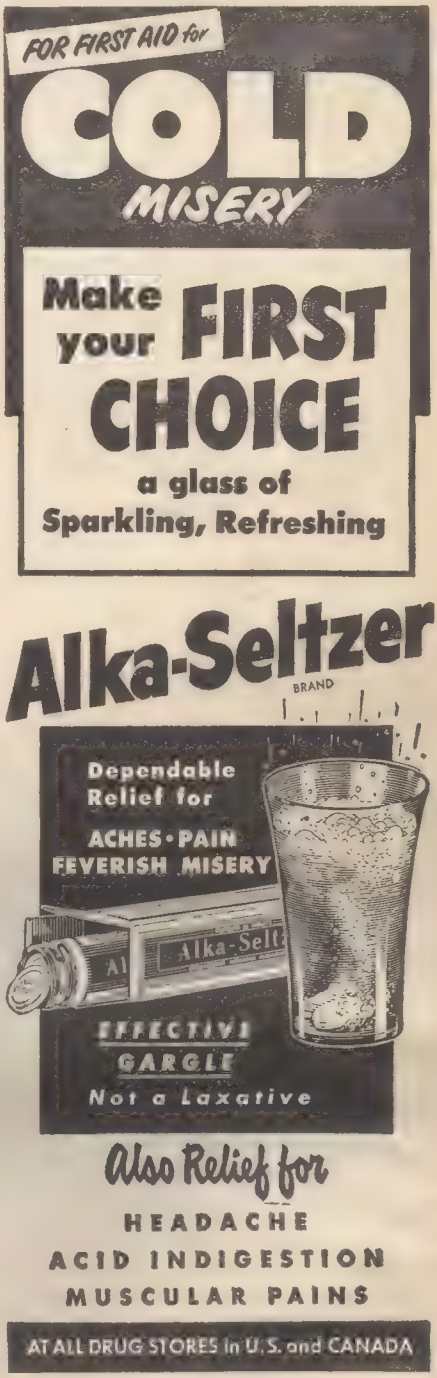
Still speaking of the Burlington, DeGroot tells us that he has just re-read *On the Spot,* in which Donald Steffee referred to certain fast mail trains between Chicago and Council Bluffs.

"I was on that run," DeGroot recalls, "old Nos. 7 and 8, for a year between Chicago and Burlington and was in the Monmouth wreck of October 17, 1890. What interested me most in Steffee's comments was his remark about Engine 590, which I often coupled onto train No. 7. I knew Frank Bullard, and Edward Giddings, a throttle artist who was later killed in his cab at Biggsville.

"Our double-track line crossed a small stream twice at Biggsville. The two bridges, being through spans, were protected by telltales; but Giddings must have forgotten that his engine, No. 590, was wider than our other engines, for he leaned out the car window, striking a post with his head. The fireman noticed that the train was roaring across the Mississippi River without reducing speed. Then he saw his engineer was dead."

ONLY FIVE passengers in addition to seven crew members were riding a Duluth, Winnipeg & Pacific (CNR) passenger train that was derailed recently by a rock slide, reports Daniel Kerelko of Route 2, Floodwood, Minn. There were two coaches, two express cars loaded with fish, a mail coach and another express car, with a mail clerk and an express man as well as the train and engine crew. Things look pretty bad for a railway when the crew outnumbers the passengers.

"This dearth of passenger traffic is not restricted to the DW&P," our correspondent adds. "Great Northern trains 35 and 36 between Duluth, Minn., and Grand Forks, N. D., run almost empty. Ancient equipment and poor schedules are forcing



the business to a bus line. It seems that the railroads of this territory are interested only in their Duluth-Chicago and Duluth-Twin Cities runs, making little or no effort to regain traffic lost to buses. The trend away from the railroad, with its slow-moving, beat-out coaches, to the newer and more luxurious buses, is likely to continue as long as the buses provide convenient schedules and cheaper fares."

NEW ENGLAND'S only remaining *Atlantic* and *American* type locomotives are still going strong, reports Albert G. Hale of 41 Woodcliffe Road, Lexington 73, Mass.

"The Boston & Maine No. 3235, a 44-year-old 4-4-2, handles a commuter round trip between Clinton, Mass. and Boston five days a week," he writes, "plus a mid-morning run between Boston and Wilmington, Mass. One Sunday she did extra duty as a second engine, behind No. 1415, a *Mogul* of similar vintage, hauling a fan-trip sponsored by the Railroad Enthusiasts over 250 miles of B&M main and branch lines. The train, with 11 steel coaches, carried some 800 fans. The small power was necessitated by the run over light rails of the Ashuelot branch. Black smoke was much in evidence as the two old girls wheeled the heavy train up such grades as Ashburnham hill going west and eastbound through Royalston.

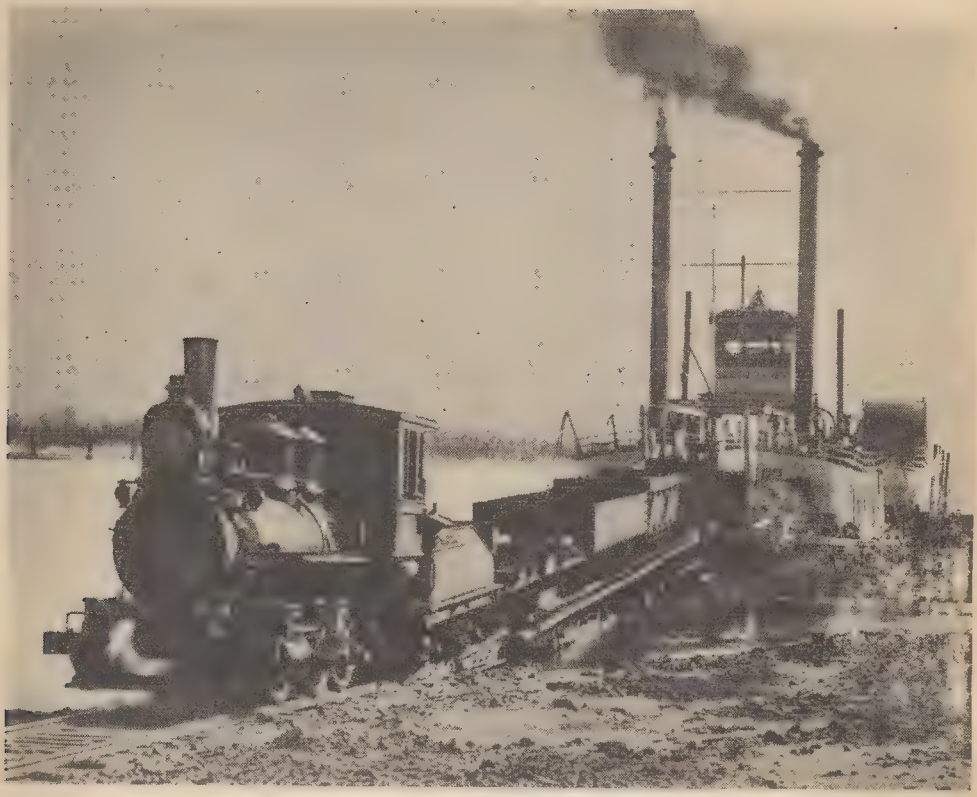
Wm. D. Edson, Indianapolis

New York Central's old *New England States* power, *Mohawk* 3001, at Riverside, Mass. in 1946. Although Dieselizing rapidly, NYC won't scrap L3 Class locomotives for some time, utilizing *Mohawks* elsewhere

"Two days later I stopped at Penacook, N. H. to see a famous old-timer, No. 3 of Stratton & Co., a 4-4-0 that used to be the Woodstock Railway's *J. G. Porter*.

Tehachapi means labor for Southern Pacific work train in California mountain loop country, specifically Vanderbilt-tendered *Mikado* 3262

Frank Clodfelter



Missouri **of Missouri Pacific. Car ferries *Missouri* and *Pacific* transferred freight cars across Mississippi from 1872 until 1902. Ferry at Stein Street in St. Louis in 1890s oozes riverfront atmosphere**

Her engineer, Clinton Atkinson, told me she was still in good shape. She switches cars from the B&M line to the Stratton flour mill."

The Woodstock, a 14-mile Vermont line, was abandoned in 1933; and even then the *J. G. Porter,* named for the road's first superintendent, was a staunch veteran from 'way back.

UNLUCKY 13. An item about Earl Conrad in *On the Spot* draws this comment from E. A. Lovell of 612 Main Street, Dover, Ohio: "I have been a Pennsy conductor on the old CP Division since 1922, but in '27 I was flagging a pool car for Conductor E. Spies of New Philadelphia, Ohio, between that point and Mahoningtown, Pa. One August night we were called to run light, only the engine and a caboose, from Mahoningtown, with Engineer J. J. Reese, Fireman Bob Zurcher and Head Brakeman H. Mason.

"While we were waiting at HS tower, just after leaving town, a train came in sight behind us but not close enough for me to flag him. This train, I learned later, was BEC-1, Buffalo-Erie-Canton No. 1. Several stations further on, we had to pick up two cars of pig-iron. Backing in, we closed the main track switch but left the inside one open. That held the block.

"When we were ready to go, BEC-1 was waiting at the block. We crossed out and went ahead of him. At Youngstown we were given a permissive signal while BEC-1 had a stop block. When we arrived at Division Street a train was pulling in at the east end of Mosier yard. As we were heading there, too, Engineer Reese whistled off so the man ahead would leave the switches open for us. Of course, we had to slow down to follow him. I knew that BEC-1 was coming behind us, but as you can see east from Division

Rail Photo Service

To make the Cheat River Canyon climb, Baltimore & Ohio resorts to pair of *Pacifics* to hammer up grade with 13-car special on way to Grafton, W. Va.

Street for 60 or 65 car-lengths I felt sure he could see us.

"It turned out he had not seen us. Before I could get back to stop him, he hit our caboose, jamming it into a car of pig-iron. That train had 13 cars. We had engine 7138 and caboose 980113. That make three 13s. I was laid off awhile without pay for failure to drop a fusee in front of BEC-1, while my conductor also served time for not seeing that I did so."

ALTHOUGH Paul Lutz bought a house in Grand Junction, Colo. 29 years ago, he has used it only one year. Paul was a maintenance-of-way employe of the Denver & Rio Grande Western at Pueblo, Colo., living in outfit cars on nomadic assignments. Now, retired from railroading after 40 years service, he is living with his wife in his own home.

TOP RAILFAN in U.S.A., according to Ward Allen Howe, railroad travel editor of the *New York Times,* is Rogers E. M. Whitaker of New York City, a life member of the Railway & Locomotive Historical Society, who claims to have traveled 675,000 miles over 350 different railroads in the last 14 years. And the top engine-picture collector, so far as we know, is still Joseph Lavelle of 4615 66th Street, Woodside, L. I., who claims to own at least 35,000 locomotive photographs, all different and classified, nearly all of them being North American steam power with or without trains.

MORSE CODE needs no revision, according to Frank M. Darby of 834 North Massasoit Avenue, Chicago 51. "The suggestion that it be revised for the benefit of those who may find it difficult," he writes, "presupposes that the code itself is responsible for the low efficiency standard which fathered the thought, and that aptitude, study and practice are of lesser importance in making an operator. These assumptions are wrong. The proposal to change the code treats only the effect, leaving the cause untouched."

Darby points out that the art of telegraphy is as difficult to master as music and that simplifying the code would not raise the efficiency of the tyro any more than re-stringing a violin would make a concert artist out of a third-rate fiddler.

"I am a skilled operator because I studied and practiced telegraphy as a youth, and I am an inferior musician because I did not study and practice music hard enough. I have tried so-called simplified methods to improve my music but found one as difficult as another.

"In 1912 I went to Malvern, Iowa, on the Wabash, to rest up after a long, hard grind on a fast Kansas City wire and there I learned the reason for the tyro's plight. All I did was sell tickets and hustle baggage and mail. I didn't do enough telegraphing to earn my salt. On such a job even an efficient op would go into an immediate and prolonged decline in both sending and receiving. When he came out of it he'd find himself far below his normal standard. So how could a beginner be expected to improve?

"I find no inconsistencies in the Morse code and its signals. To me it is perfection. The sounder is no mere mechanical device that clicks out combinations of dots and dashes to be translated into words. It is a human voice speaking to me. I don't have to translate. There is nothing to translate. If a man must translate he has not mastered the code.

"Mastery does not come to him who sits around a way station waiting for a train to go by so he can OS it. Get to work on that key, boy! Don't stop working till you have mastered it—and when you have, you won't need simplification; you can telegraph in any code."

BROADSIDE COLLISION. William F. Richter of 581 Minna Street, San Francisco 3, wants information about an excursion-train wreck near Atlantic City in July, 1896, in which his grandmother, Mrs. Sally Fries was among those killed. He adds: "My grandfather also was in the wreck. My mother said he returned home cut and bruised, his shirt oil-soaked from lamps which broke as the smoking-

car fell over. She said also that a song about the wreck blamed the engineer.

Editor's note: At 6:48 p.m., July 30, 1896, a Reading (Atlantic City RR.) passenger train smashed broadside into a West Jersey & Seashore excursion train filled with members of the Improved Order of Red Men and their families at Meadow crossing just out of Atlantic City. The excursion engineer, Edward Farr, died in his cab with one hand on the throttle and the other on the brake valve. Altogether, 44 persons were killed and scores injured. Both trains had been running at rather high speed. Three cars were upset, one completely submerged in the channel. Morbid sightseers stripped the coaches of their furnishings as wreck souvenirs and even robbed the dead.

A coroner's jury found Farr guilty of not having had his engine under control and censured the other engineer, John Greiner, and the signal tower operator, George F. Hauser, for neglect of duty.

Another tragedy on an Atlantic City run occurred last July 21st when a driving-rod snapped, puncturing a main boiler tube on the locomotive of a Philadelphia-Atlantic City express, Pennsylvania-Reading Seashore Lines. Engineer Frank E. Fritch was badly burned by live steam under 200 pounds pressure spurting into his cab but managed to stop the train with its 208 passengers. Fireman Richard Ryker, who leaped from the seething cab, died of a broken skull.

NO READER yet has come across with a case where a conductor's name was painted on his caboose, but Walter Thayer of Box 1588, Chelan, Wash., quotes an old-timer friend, E. A. Wilhelm, as saying that a Rock Island skipper, name not remembered, was chairman of a winning team in a safety program and had *Chairman* painted on the side of his caboose.

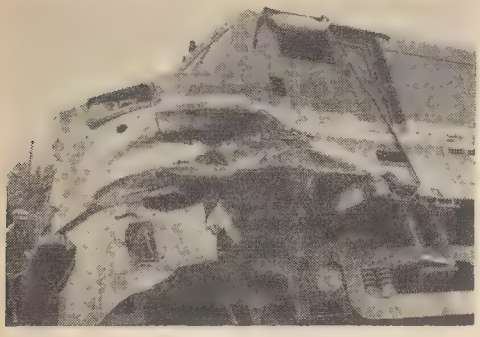
LAST STOP is the Reader's Choice Coupon (page 140) which guides your editorial crew in selecting material for future issues of *Railroad Magazine*. Some readers use the coupon. Others prefer not to clip the magazine; they send home-made coupons, postcards or letters. Regardless of how votes are given, all count the same. Results of balloting on the September issue show as follows:

1. Erie Engines, *Lucas*
2. Flying Saucer, *Thompson*
3. Land Grant Legend, *Gross*
4. Light of the Lantern
5. On the Spot
6. Graham Cutoff, *Wakefield*
7. Branchline Local, *Murdock*
8. South Park Bogie, *Lathrop*
9. Locomotives of the MoPac
10. Unforeseen Contingency, *Armes*

Best photos: 24, 38, 40, 41

Philip Hastings, Rail Photo Service

Diesels are taking over on run, but two *Ten-Wheelers* arrive at Newport, Vt. from Montreal on Canadian Pacific freight No. 904, crossing estuary of Lake Memphremagog into town



Closeups show extensive damage better. Point-of-impact shots help get your pictorial point across, too

WRECK PHOTOGRAPHY

PETE SUMMERS

FROM many accidents that occur on our vast system of railroads—whether it be minor mishaps or major disasters—complications always follow. It makes no difference whether the accident involves only railroad property, or if the public is involved—hours of intensive investigations by various departments result. Investigators include insurance companies and in many instances the Interstate Commerce Commission. In any accident, photography plays an important role. The railroad, as does many other major companies, uses a great number of photographs. It is surprising to find out the vast amount of claims filed daily against the railroads. Many of these claims are justifiable; however, many people file claims only to obtain some easy money. Oftentimes persons take for granted that, since a railroad is big and possesses much wealth, claim adjusters will beat a path to the door and money will be handed out in vast sums with an apology,

RAILROADING ain't all ROMANCE

Articles in RAILWAY PROGRESS magazine show you that:

it's people . . .

"Bowery Bums" who work on the tracks and don't always stay around for payday.

"Dock Rats" who meet ocean liners to sell railroad tickets.

it's labor . . .

The telegraphers who got their start with a secret code.

A trainman on the Pennsy who got knocked off a boxcar his first day on the job.

it's competition . . .

With truckers who use filet mignon and bourbon to woo state legislators.

With air lines who get huge subsidies from the deficit-ridden Post Office Department.

Of course, there's romance in railroading too. And RAILWAY PROGRESS magazine gives you its share. There was the man who wanted to haul ocean-going ships across Mexico on a six-track rail line . . . Jay Gould, the rascal who left some good behind. Romance and rail facts—if you want to get the whole story you should be reading RAILWAY PROGRESS. If you haven't, you've been missing 48 pages each month packed with pictures and information about every phase of this fascinating means of transportation. And its title has real meaning: This magazine is helping the industry, every railroader, and every friend of the railroads to bring about Railway Progress.

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All photos by the author

Photos that sell. It looks simple, but can you show the names of two railroads; serial numbers on four cars; position of wrecked equipment, and the damage?

"Sorry, we didn't intend to play so rough."

Any railroad can be wrong in accidents, and in many instances they are. They certainly won't deny this, but when they are at fault, they will see that you are compensated. One pointer worth remembering is the railroads have a most efficient personnel to screen claims filed against them. They usually know whether they are being taken for a ride, as railroads employ the best attorneys obtainable, men who are well trained. This is where photography plays a mighty important part.

Even though railroads have their own photographic staffs, they can't be every place at once. So, if you have a hankering to do some freelance work in the photographic field for railroads, there is no reason why you can't. Claims departments are in the market for such material—accident coverage. First, you must establish yourself with the railroad. Contact the

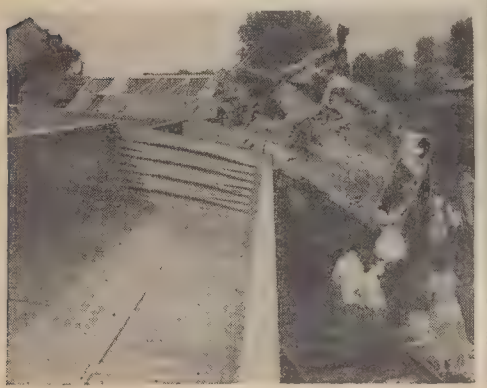
In wreck photography always include a few long shots, showing as much of entire scene as possible. This example shows position, among other do's

claims department and tell them of your intentions—that you wish to do some freelance work for them. Make it clear that whatever you have will be submitted to them for their own use. Nowadays, railroads rely on people not affiliated with them to furnish them much material of this kind, but I can remember only a few years back when you would be run off if a company official caught you with a camera at a railroad accident. This still happens in some instances.

I have been covering accidents of various kinds on one of the major railroads, but to do this I had to establish myself with all officials of the division I reside in. If the railroad finds that you are on the square, interested in doing freelance work for them, and that the material is available to them, you won't have much trouble.

Now, for those of you who have a knack for photography permit me to give you a few pointers on photographing railroad accidents. First, may I suggest it would be well if more railroad employees would take up photography, and always carry a camera. Many already do. You arrive at the scene of an accident with your camera. Let's pretend it is a derailment and there is considerable property damage, as well as bodily injuries. Assuming that you know how to handle a camera, we won't go into that. It's what you shoot and how to shoot it that makes

Use your head by looking for angles, one being damage to equipment. No question here; picture speaks for itself



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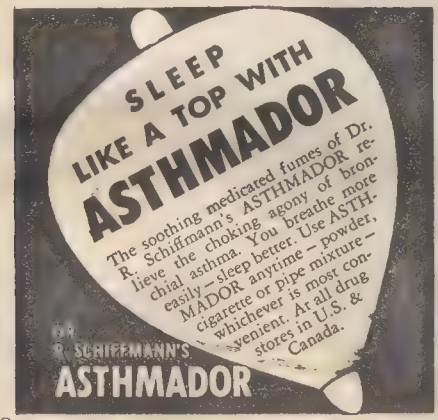
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good accident photography. The picture must tell a story. Use your head and look for the angles. Show the damage to the equipment; display the name of the company that owns it. Above all, if possible, include the number of the equipment. Closeup shots of track damage are important. Make all your close shots first, then move back and get a complete coverage of the entire scene. This will show the position of the wrecked equipment.

Three important rules to remember in shooting accidents are: Names, numbers and position or location.

We will now take up an entirely different phase of accident photography—the crossing accident, where persons are killed or injured. This type of picture will be used eventually by the claims department, which, you may rest assured, will be interested in getting them.

This sort of accident is seldom pleasant to look at and happens at break-neck speed, so you must be a man of action and be able to know in a split second what to shoot. First, get shots of the dead or the injured, if possible, before they are moved. The question I have been asked several times is: "Can a person take pictures of dead or injured persons at an accident without running into difficulty?" Technically there is no law that prohibits the taking of pictures of this kind. This is the same as news photography; A photographer can shoot anything that is a public scene. But the railroad can object,

Another angle. Besides showing serial numbers and who owns equipment, picture lets you know about extensive damage to rail trucks

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There's drama and excitement aplenty in this story of Gaudy and his women, there's color and the feel of life in the vividly authentic background. For lovers of Americana, for anyone who appreciates a good story well told, it's first-rate reading.

OR

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It was sundown when Kurt Werden reached the tiny pueblo high in the Andes. He carried a heavy pistol and an old newspaper clipping which read, ENEMY LEADER DIES IN BESIEGED CITY. He demanded an impossible thing—to be taken to San Cobar.

The villagers had heard of San Cobar. The old legends said that it was a place of great wealth. But it lay beyond the mountains from which no man had returned alive. True, El Borracho, the drunken trader, had returned from his mysterious wanderings with rich ornaments, but he was now far gone in drink.

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Stories, features and departments I liked best in the November issue are:

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2. .....
3. .....
4. .....
5. .....
6. .....

Best photo on page

Name.....

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charge you with trespassing and order you off railroad property. However, if you have established yourself, you can move about with ease.

In shooting crossing accidents be sure you get pictures of the damaged vehicles as soon as possible. Be sure to show the point of impact as well as license numbers and names, if there are any. Shoot the crossing to show any possible obstruction. Take several shots that will show the wreck from all directions.

Among my pet shots that have proved important are pictures of spectators who generally congregate at a scene of this kind. This sort of picture can be used later to identify witnesses to the accident. No one can press charges against you for taking the picture, as it would be a public scene, where no one can claim the right of privacy.

Now you are ready to prepare your photographs for submission to the railroad. After you have thoroughly covered the accident and have your material, notify the local station agent that you have such material and that it is available to the railroad should it be wanted. The railroad in turn will notify officials of the claims department and in a few days some-

one will call on you and look it over. Should they find that it is of value to them, they will use it.

Just any photograph taken at the scene of an accident, by itself, is not complete. You must have captions to tell what it is. Always remember to take notes on each one of your shots. This must include the time of day or night the photograph was taken, the place the camera was setting and describe fully what the photograph shows. If you are showing a picture of the wrecked vehicle 50 feet west of a crossing and on the west side of the track, designate this on the caption. All information for the caption should be typed on a separate sheet of paper and pasted on the back of the print. This procedure is important in the investigation by the claims department, and, should these pictures be used in court, it is necessary that this information accompany the picture.

Prices paid for pictures run from $2 to $5 a print. Railroad companies know what a reasonable price is for such material, so don't overcharge. However, they don't expect you to do your work for nothing.

At this point the question is: who owns these photographs? That is, can you sell these pictures to anyone except the railroad? In freelance work sometimes you can sell your pictures as stock photographs. This gives you the right to sell duplicate prints to anyone. But, if you wish to make an impression with the railroad it will be better to give them exclusive rights to the use of them. Should the railroad engage you to do some photographic work and pay you for it, the road controls the right to the photograph and you can't sell duplicates to anyone else without the company's permission.

If you are looking for something good in freelance photography, and succeed in getting the railroad on your side, you can make a few dollars.

Whenever photo features for the Railroad Camera Club are available we will publish them in this department. Next month's will be *The Shop Photographer*, by D. L. Joslyn

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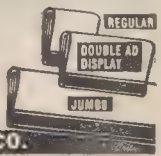

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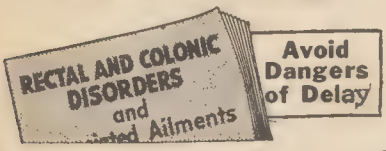

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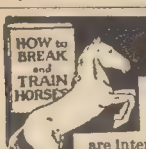

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ITEMS sent to the *Switch List* and *Model Trading Post* are published free, in good faith, but without guarantee. Write plainly and keep 'em short. Print name and complete address.

Because of time needed to edit, print and distribute this magazine, all material should reach the Editor nine weeks before publication date. Redball handling is given to items we get the first week of each month, if accompanied by latest Reader's Choice Coupon (clipped from page 140 or home-made).

Do not use the term *pix* interchangeably for photos and drawings. Specify *photo* or *drawing*.

The term *tts.* refers to public timetables, unless preceded by *emp.*, when it means employe's (operating) timetables.

(R) indicates desire to buy, swap or sell back issues of *Railroad Magazine* or its predecessors, *Railroad Man's Magazine* or *Railroad Stories. (Specify condition of each copy.)*

(*) indicates juicefan appeal.

Switch List

(R) HARRY BEATTY, Box 148, Nashville, Ill., will sell *Railroad Magazines, Trains, Model Builders, Model Railroader, Model Craftsman,* unclipped, good cond. Wants *Trains,* Vol. 1, 2, 3.

(*) ELMER J. BRASWELL, 1581 Melrose Dr. SW, Atlanta, Ga., buys, swaps, sells size 116 negs., photos trolley and interurban lines, all parts of country, abdn. and present. Esp. wants old lines and steam engs. Invites foreign corres., all countries.

JOE H. BRUNER, East Marion, N. C., will sell negs., size 5x7, 50c ea.; 620, 20c ea.; p. c., 25c ea.; most are South action and Clinchfield in mountains near Marion, N. C. Also has 750 photos, size 127 to 5x7 diff. rls.; will sell for $5.

(*) THOMAS N. BYRD, 1244 D St., NE, Washington, D. C., will sell picture albums of trs., engs.; one has 211 photos all diff., $7 plus postage; 173 with 15 elec. photos, $5.50 plus postage. Has Maryland & Penn, B&O, C&O, PRR, IC, B&LE, IS, ACL, SAL, Erie, WB&A, WRy., etc.

(*) BILL COOK, 3216 W. 35th St., Cleveland 9, O., sells, trades photos abdn. interurban lines out of Cleveland, CTS, Chicago, Cincinnati, Ashtabula city cars.

(R) R. H. CARLSON, Box 56, Combes, Tex., will sell 55 *Railroad Magazines* Aug. to Dec. '46; '47; '48; '49; '50 exc. July; Jan., Mar., Apr. '51; 57 *Trains* Aug. '41; Sept. to Dec. '46; '47; '48; '49; '50; Jan. to Apr. '51; 20c ea. Also *Trains* SP photo books, 75c.

(R*) FRED FELLOW, Farmington, Utah, offers 50 odd issues *Railroad Magazine* from '41, $11; 55 odd issues *Trains* from '44, $15, prepaid postage, all unclipped. '36 *Off. Guides,* $2. Utah interurban, NWP El, IER, WP, SP, UP, ATSF emp. tts. dating back 35 yrs.; SP, DRGW, UIC, SLU rulebooks.

STEWART GILBERT, 1126 E. 51 St., Brooklyn 34, N. Y., wants info. on old NY, Boston & Westchester, South Brooklyn RR and Bush Terminal.

FRANK GUERNSEY, 700 NE 47th Ave., Portland 13, Ore., wants to buy, sell, trade negs. size 616 NP, GN steam locos; also buys transportation tokens, any kind.

(*) WRIGHT HOPE, 1320 Jones St., Little Rock, Ark., wants to trade negs. Of Class I RRs, elec. lines. Would like to buy 616 Eastman Monitor; wants loco rosters, any rd.

CARL B. LAMB, Box 513, Nashville, Tenn., wants recordings of tr. whistles and other sounds, no Diesels. Write first, stating price, description.

(*) WM. LEUTZ, 116 Dartmouth Dr., Toledo 14, O., wants copy *Interurban Trails* by Joe Gallaway.

P. L. LUCE, 1605 22nd St., NW, Washington 8, D. C., wants to buy recent issue Erie rulebook; rulebooks other trunk, continental lines. Also photos Erie locos. State price, cond.

HENRY McKINNIE, 14 W. Stockton Ave., Rm. 15 NS, Pittsburgh 12, Pa., will buy, sell, trade obsolete and modern RR or other corporation stocks or bonds.

(*) JOHN A. MACLEAN, 17 Foxbar Rd., Toronto 5, Ont., has new list of high-quality Canadian steam, elec. photos, BCER, CN, CP, PGE, TTC, WECo., other lines, size 116, 10c ea.; list, 2 samples, 25c.

(R) JAMES MATTSON, 5037 17th St. NE, Seattle, Wash., will sell *Railroad Magazines,* some '33 to '35, '39; any issue '40 to '47 or will trade for or buy GN emp. tts., any div. or other GN items.

(R) PAUL J. MERLAND, 2707 Dacey Ave., Cincinnati 9, O., will sell 74 *Railroad Magazines* '42 to '51; 37 *Trains* '47 to '51; 39 *Model RR,* '44 to '50; 20 *Model Craftsman* '45 to '49; all good cond.; $12 express collect.

L. D. MOORE Jr., 2102 Parker Ave., Portsmouth, Va., will buy or trade for photos steam power on Central Ind., Cinn., Lebernon & Northern, photos of classes H6, H6A PRR or photos of any rds. buying H6, H6A from PRR. Has many size 116, 616 photos ACL, Sou, SAL, A&D, N&PBL, N&W, NS, VGN., PRR, others to trade.

HERBERT NOONAN, 104-18 120th St., Richmond Hill, N. Y., will sell to highest bidder *Off. Guide* May '39 leather bound; 2 issues *Tracks* (C&O) thru '50, also leather bound for ea. yr.

(*) HENRY G. PETERMANN, RFD 2, Narrowsburg, N. Y., has 620 trolley photos NYCity, Phila. areas, LVT, Atlantic City, Scranton, WBT, Toronto. List, sample 10c.

STANLEY PRESCOTT, 70 Pleasant St., Rockland, Me., will sell size 116 neg. photos Oahu Ry., New England, southern rds. List, sample 10c.

(R) CARLE RAYBORNE, 322 N. Palm, Ontario, Calif., wants *Railroad Magazine* containing steam locos of SP; also wants emp. tts., photos SP.

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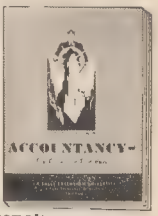

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(R) ALLEN A. SHARP, 100 Shennecossett Pkwy., Groton, Conn., still looking for old photos, historical data on Bangor & Aroostook RR and its acquisition rds. Will sell or trade for anything BAR, compl. *Railroad Magazines* '39 to date, old 1888 to 1901 tts., emp. tts., tkts., RR, steamship travel folders, maps; rulebooks; *Equipment Registers, Off. Guides,* city maps, directories. List for stamped evn.

(R) FLEM D. SMITH II, 517 S. Broadway, Georgetown, Ky., wants to buy May '44 *Railroad Magazine* to compl. files.

(*) WALLY STEIGERWALD, Cobb Hill, Aurora, Ind., wants size 616 still photos steam engs., rosters, emp. tts. NYC, CCC&StL, MC, B&A, P&LE, P&E, IHB, CR&I, CK&S, LE&E, PMcK&Y, U&D. State price ea. item.

S. V. SWANEY, 569 Cline St., Columbus, O., will sell 200 tts., emp. tts., folders, RR curios dated 1877, 1888 to 1939, $60 plus postage.

(*) RICHARD TESCH, 6853 Northwest Hy., Chicago 31, Ill., will sell set 14 photos size 616, MoPac, Houston North Shore rail-bus line, ex. interurban line.

ROBT. E. THOMPSON, 801 Lamar Ave., Charlotte 4, N. C., will trade 2x2 dupl. color slides of Southern, Seaboard, ET&WNC, n. g., P&N pass. cars for Kodachrome dupls. taken at Chicago RR Fair.

(R) W. A. VAN ALSTINE, c/o Railway Express Agency, Syracuse, N. Y., will sell 102 *Railroad Magazines* '33 to '41 and earlier issues, clipped slightly; $10 plus postage; *American Ry.,* 1889, $3 p. p.; *Off. Guide* '42, good cond., $1 p. p.; 150 emp. tts., 20c ea. p. p.

(*) ALLAN VAUGHN, 216 N. Harvey Ave., Oak Park, Ill., wants info., photos, maps, on old Chicago & West Towns Elec. Ry. and its predecessors.

(R) ARTHUR VIERECK, 808 N. Hidalgo, Alhambra, Calif., wants Oct. to Dec. '33; Dec., '46; Jan. to Apr. '47; Apr., Nov., '48; Jan., Feb. '49 *Railroad Magazines* in good cond. Will trade in good cond. Aug., Dec. '46; June to Aug., Nov. '48; Feb. to May, Aug. '49 *Modern RRs;* Mar. '50 *Railroad Magazine.*

(R) H. K. VOLLRATH, 2524 Meriwether Rd., Shreveport, La., will sell var. *Railroad Magazines* '40 to '51; also *Trains* Nov. '45 to June '50; 25c ea.; many emp. tts., annual passes dated in early 1930's. Send stamp for list, sample annual pass dated 1938. State wants.

(R) JOHN WEIGHTMAN, Box 696, Sacramento, Calif., will sell *Railroad Magazines,* in good cond., Mar. '40; Feb. to Apr., May, Aug. '41; Sept., Oct. '42; Feb., Mar., June, Aug., Oct. to Dec. '43; Feb., Mar., Aug., Sept., Oct., Dec. '44; Mar. to Sept., Nov., Dec. '45; Jan. to Apr., May '46; all for $8.50.

JOHN F. WILDE, 4554 N. Meade Ave., Chicago 30, Ill., wants to buy loco photos CB&Q built prior to 1910; esp. classes A3, 4, 5, 7, K5, 6, 7, 9, H5, G2, R2, D3. Write first, stating photos, price.

RUDOLPH W. WITTEMANN, 142 Henry St., Brooklyn 2, N. Y., will sell *Model Craftsman* May, June, Nov. '36; Apr., Oct., Dec. '37; Apr., May '38; Aug. '30; Feb., Apr., Dec. '40; Feb. '41; 30c ea. Also *Trains* Sept. '48, 30c ea. Wants '47 *Loco Cycl.*

(*) JORDAN ZIMMERMAN, 130 Shorewood Dr., Great Neck, N. Y., wants trsfs., p. c.'s, booklets. Has list of railroadiana he offers in trade.

RAILROAD CAMERA CLUB is open to all who collect railroad or streetcar pictures or other railroadiana such as timetables, passes, train orders, trolley transfers, magazines, books, etc. There are no fees, no dues.

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Model Trading Post

R. G. BOOTH, 6008 Chelton Dr., Oakland 11, Calif., wants to trade Bentendorf, Andrews or caboose trucks (sprung) for archbar or fox patent; all trucks run about hr., good to excell. cond. Also wants to trade model RR passes.

(R) WALTER J. CONLON, 309 Covert St., Brooklyn 27, N. Y., will trade all or part of 125 *Railroad Magazines* Jan. '36 to Jan. '51, 49 *Model Railroaders* June '46 to May '51; all good cond. for HO gage *Mantua, Belle of Eighties, Mogul, Goat* or old-time pass. eqpmt.

ERNEST HAMMER, 72 W. Jackson St., Marshall, Mo., will sell 36, 1¼ steel flues, new, 36-in. long, just right for miniature steam loco. Wants used steam park-size loco.

W. JENNINGS, Orchard Cottage, Clements Green Lane, South Woodham, Chelmsford, Essex, England, will sell 9½-in. gage coal-fired steam locos true scale *American, Pacific Santa Fe* types; super detail finish, pass. haulers.

MAJ. HERBERT J. LYONS, 3558 Lorne Ave., Montreal, wants copies of Apr. '50 *Railroad*.

GEORGE NICHOLSON, 106 West Ave., Westby, Wis., Will sell 027 gage loco, cars, eqpmt. State your wants.

JOHN A. PHILLIPS, 903a N. 8th St., East St. Louis, Ill., wants to buy used *Lionel* or *AF* at reasonable price.

ALLEN A. SHARP, 100 Shennecossett Pkwy., Groton, Conn., will trade 8 well-built HO scale frt. cars, incl. caboose, for *Varney* F-3 "A" unit-powered with Lindsay motor truck; kit or built-up; intends to repaint. Write first.

Flagstops

CONNECTICUT Valley Chapter, NRHS, will run an Air Line and Valley Branch Figure 8—Fall Foliage trip Sunday, October 14, on the New Haven. Special train leaves New Haven, Conn. 9:45 a.m. after arrival of New York connections, go to Willimantic via Air Line, with 1 hour 25 minute lunch stopover at Hartford; leaving there at 2:30 p.m. to follow the Valley Branch along Connecticut River to Old Saybrook, then via Shore Line into New Haven, due at 5:35 p.m. Round trip fares $3 from New Haven; $2.10 from Hartford for those wishing to ride the Valley Branch only, ticket good for return ride from New Haven to Hartford on Train 58, due Hartford 6:35 p.m.; or passengers may board train in Middletown at 10:45 a.m., ride to Willimantic and Hartford and leave train at Middletown again at 3:35 p.m. Write Edward G. Kelly, 20 Lake Pl., New Haven 11, Conn., for tickets and a circular with compl. info.

TRANSPORTATION, issued in connection with Conn. Valley Chapter, NRHS, May 20 railfan trip over New Haven main frt. line from New Haven, Conn. to Maybrook, N. Y. is available at 30c ea., plus 3c postage; booklet gives brief history of development of Maybrook freight route, important mile-long Poughkeepsie bridge and viaduct over Hudson River, plus facts and figures about the Maybrook yards; illustrated with old-time and modern pictures and timetable reproductions of Central New England era. Write Roger Borrup, Warehouse Point, Conn., if you wish copy.

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